Hart, Schaffner & Marx Prize Essays

XIV

THE VALUE OF ORGANIZED SPECULATION

THE VALUE OF ORGANIZED SPECULATION

BY

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PREFACE

This series of books owes its existence to the generosity of Messrs. Hart, Schaffner & Marx, of Chicago, who have shown a special interest in trying to draw the attention of American youth to the study of economic and commercial subjects. For this purpose they have delegated to the undersigned committee the task of selecting or approving of topics, making announcements, and awarding prizes annually for those who wish to compete.

For the year ending June 1, 1911, there were offered: —

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Any essay submitted in Class B, if deemed of sufficient merit, could receive a prize in Class A.

The present volume, submitted in Class A, was awarded the second prize in that class.

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AUTHOR'S PREFACE

In this short monograph the attempt is made to consider in a spirit of fairness the much controverted question of the value of organized speculation. The undertaking is a difficult one from the fact that the exchanges themselves are in a formative stage, as is also public opinion concerning them; and the positions taken by the respective disputants are far apart.

The question of prices is an abstruse one; and, in the subject under discussion, we must attempt to discriminate between the price-making factors which are general in their effects and those which are peculiar to the exchanges. Yet the elements which determine prices blend into one another almost indistinguishably. As regards the general effects of organized speculation upon business, the matter is beset with further complications; and it is almost impossible to express one's self with accuracy about the various phases which the facts assume, without appearing to make contradictory statements.

Upon a commercial exchange the weaknesses of human nature are exhibited at every point. The hopes and fears of the persons involved, the peculiar nature of an organization which leaves individuality untrammeled, but at the same time gives opportunity for the display of the mysterious psychology of a crowd, as well as the temptations of the gambling spirit, are among the factors to be considered. All these and other determinants act and react upon one another in great complexity. It is impossible to reduce the discussion to a few simple formulas and rules, or even from an extensive consideration of statistics to formulate a machine-made plan for accurately describing the head, the brain, — the nervous system of our modern commerce.

The writer therefore asks the indulgence of his readers if he be obliged in some cases to point out that causes and effects are so intermixed that definite conclusions cannot be reached in regard to particular departments of the subject, or if he fail to reduce his discussion of ever varying human moods and passions to the regularity of a mathematical diagram.

Organized speculation is important in the present. It will become of much greater importance in the future. As hinted in the text, it contains within itself suggestions for the solution of social problems which are the present-day puzzle of statesmen and philanthropists. It is worthy of the study of specialists in economics, in ethics, and in psychology; and it is of such practical importance that it should receive attention and consideration from all classes of the people. In order to help, even if it be but little, in awakening a wide interest in the discussion of the subject, the writer has attempted wherever possible to use the popular style.

HARRISON H. BRACE.

CHICAGO, December, 1912.

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INTRODUCTION

The subject of this essay will appear to most minds a strange one. "What can be gained," the extremist will ask, "from a discussion of the value of organized speculation, when it is perfectly obvious that it has no value and only leads to human misery? Surely, it needs no argument to prove that suicide should not be encouraged or that defalcations in positions of trust are not desirable." "What," exclaims the ardent sentimentalist, "can be more plain than that it is all pure gambling? And why not sweep the whole accursed thing away, instead of discussing the question of its possible usefulness?"

But organized speculation, though it be the common scapegoat, still survives: and though Germany, for instance, has made drastic attempts to change the methods by which certain commodities and securities are dealt in on the bourses, yet she has met with no real success. In the meantime exchanges prosper; their memberships become more and more valuable; and they build more and more costly palaces in which to conduct their business. May it not be that prejudice is the cause of much of this outcry? And are we perfectly certain that the frequent charges made have been conclusively proven? Thus, is there any proof for the charge that transactions upon the board of trade have nothing to do with actual commodities, and that no deliveries are made on future contracts? Surely, some of the statements so often heard are unfounded; and random assertions made without investigation should not be accepted as truth.

If the business of speculation were not the subject of prejudice, it would be the only business which has not, at one time or another, been under suspicion. War, at one time, was considered as the only proper calling for a gentleman; and trade was thought to be quite degrading in its effects. Even greater than the prejudice against merchants was that against money lenders, tax collectors, or bankers. We find the actor at certain periods looked down upon. Even the profession of letters has been considered an inferior one; and there are those who argue that one of the reasons which led Sir Walter Scott to deny he wrote the Waverley Novels, was that he did not wish to be known as a professional author.

The writer of this holds no brief for the board of trade or the stock exchange. He merely asks the reader to examine with him the arguments that may be urged in regard to the value of organized speculation, considering at the same time those disadvantages which serve to diminish that value, or even, in some respects, to overshadow it.

The Chance Element

He who would abolish chance from human affairs will have an impossible task. The truths that underlie the world may be imagined; but when we come to practical affairs, we find that there is an element of risk in all things. The first hunter who sought to entrap game found that his catch at different times was unequal. The agriculturalist is engaged in a calling in which there is certainly a great amount of risk. Such factors as drought, moisture, and other elements which determine whether crops shall be good or bad are governed, many of them, by the purest chance. In undertaking any business enterprise, the careful business man in his calculations always allows for the risk which he well knows that he must face.

Guarding against Risk

It is natural that the world should seek to eliminate this risk; and much of the progress in the sciences and practical arts is due to increasing knowledge of the comparative risks of different courses of action. By studying every factor necessary to the accomplishment of a particular task, the head of an industry is able to select that course which will be least fraught with danger.

But the most expedient method, even after it has been carefully selected, has risks associated with it which cannot be eliminated and which must be guarded against by some form of insurance or a system that is analogous to insurance. There are such perils as those of fire, storm, and death which are guarded against directly by insurance, the method being to spread them over a greater area. Thus risks are so distributed that losses in one area are compensated by insurance premiums in another. The different forms of insurance that have been invented are remarkable for their number and variety; nevertheless, there are many important risks that cannot be directly provided for in that way, but in the case of which a system analogous to that of insurance must be used. These are the general risks of business, which are infinite in the variations that they assume.

The Place of the Speculator

Some of these general risks, which cannot be borne by insurance, can yet be undertaken by a class of business men who specialize as speculators. These are the risks of fluctuations in prices due to changing conditions in different periods of time, and the handling of them constitutes the most important function of the speculative exchanges. In the case of the prices of the majority of commodities, these speculative risks are bound up with general business conditions in such a way that they cannot be separated from the other causes of expense and assumed by any spe-

cial class. But by speculation, and particularly by the machinery of organized speculation, many of these risks can be thus segregated and transferred.

It should be noted, however, that while the function of the speculator is similar in many respects to that of the insurer, the method by which his influence is applied to the world of commerce is quite different. It is not through a contract whereby he agrees to indemnify the public against loss that the speculator acts; but he performs his function by buying and selling in the market. When he believes that prices are low, he purchases. When he believes that prices are high, he sells. This he does in the pursuit of his own selfish interests; but, in so doing, his purchases and sales have an important influence upon prices, and indirectly upon the whole field of commerce.

Thus it is readily seen that the action of the speculator affects only indirectly the demand and supply of actual commodities and securities. What he buys at one time as a speculator, he must at some other time sell; for the immediate effects of his speculations are neither to produce commodities nor to consume them. He neither adds to the permanent supply nor subtracts from it. But for the moment, at the time of a purchase or sale, he exercises an important influence upon the temporary demand and supply, with far-reaching effect upon ultimate production and consumption. Or, to look at the question in a slightly different aspect, he distributes the demand and supply over different periods of time.

To sum up the above description in a definition, we have the following: Speculation is the forecasting of changes in value, and buying or selling in order to take advantage of them.[1] It is unnecessary, however, in this place to discuss the question to what class of producers the speculator

[1] *Cf. Report of Governor Hughes's Committee on Speculation in Securities and Commodities,* p. 3; Emery, *Speculation upon the Stock and Produce Exchanges of the United States,* p. 96; Chamberlain, *The Principles of Bond Investment,* p. 8.

belongs — whether, for instance, his services are a part of those performed by the capitalist or by the *entrepreneur*. That there is risk and that some one must bear it seems obvious; and the particular risks that the speculator bears are as important as any.

The System adopted

It is quite natural that the organizing tendency of modern commerce should be availed of by speculators as well as others; and the form which speculation takes when organized is that of operations upon an exchange. It should be noted, however, at this point that there are different kinds of organization. There is the form which aims to crush out individual initiative wherever possible; and there are other forms in which the uniting force is applied in such a way that, while there is constraint at certain points, yet in most respects freedom of action and individual initiative are greatly increased.

An exchange organization is of this latter class, for its tendency is to promote commercial freedom rather than to smother it. A clique or pool may exist upon an exchange in the same way that one may exist in outside commerce. But the exchange organization is entered into for the purpose of promoting, not of stifling, competition; and its machinery is so arranged as to give the opposing price-making factors the freest play.

It would, therefore, be quite fallacious to compare the organization of a commercial exchange to that of an army, whose constituent units are drilled to act in unison against a common enemy for the accomplishment of a particular purpose. A better use of the simile will be found in comparing the exchange to an organization formed for the purpose of conducting gladiatorial combats, in which the rules are so carefully framed that any one can have a chance to demonstrate any superiority he may have, and where only the fit survive.

A definition might then be framed as follows: Organized speculation is a system of bringing together speculators and other traders with a view to facilitating the freest trading among them, so that many of the risks of commerce may be segregated and borne by a class who specialize in the undertaking. The effect of this system, and particularly its value to the community, will form the subject of this essay.

Evolution and History

Little light can be thrown upon the subject by merely using our imagination as a basis for reasoning in regard to what must have been the place of speculation in past ages. It doubtless originated in the earliest forms of trading. Even among people in a low state of commercial development, it would be natural for those with a little more aptitude for commerce than the rest to take advantage of fluctuations in values, as did Joseph in Egypt. Little, however, can be learned from a study of the rudimentary forms of exchanges, since the types which developed later are quite different in character.

More significant for our purposes is the appearance of exchanges such as the Royal Exchange in London. This exchange was built through the generosity and public spirit of Sir Thomas Gresham, and was formally opened by Queen Elizabeth in 1571. The plan of the building was suggested by a bourse which had recently been erected at Antwerp, and exchanges of a similar character made their appearance in many commercial centres. The feature which differentiates this form of exchange from previous types is the fact that it involves the conscious application of the exchange idea in the erection of a building or the formal designation of a locality for the trading.

This comparatively early type of the modern exchange had a wide scope in the character of its dealings, for merchants in a number of different commodities and securities, as well as shipowners, underwriters, and others, were all

accommodated within its walls. There was speculation in the exchanges and market-places in the early days in the same way that there was speculation outside of them; but, in the types of exchanges just discussed, there was no special organization of speculation, nor was there that provision for specialization in different departments which is the characteristic of modern development. Hence we find dealers in different kinds of commodities and securities leaving the Royal Exchange and establishing exchanges of their own. So thorough has been the hegira that, at the present time, the Royal Exchange has a deserted appearance, and is used for only one important kind of financial operations, — the dealing in foreign bills.

When the different interests represented upon the Royal Exchange were separating, each provided in its new organization for the particular necessities and conveniences which it needed; and, to accommodate certain classes of trade, the latest type of exchange made its appearance, namely, the modern speculative exchange or the one in which speculation largely predominates. Although the other kinds of market-places and exchanges exist in abundance at the present day, it is this latest development, the large, wealthy, important speculative exchange, which is ever in the public eye and is intimately associated with organized speculation.

It was with the development of the commercial corporation in its modern form and with the funding of national debts that the appearance of stock-brokers was first noted. In London they first met at the Royal Exchange with other business men as just described. They were assigned to a particular part of the building, and even in those early days of the seventeenth century, there were doubts as to the legitimacy of the business; yet those who dealt in stocks were so numerous that they could not all be accommodated in the place assigned to them and they crowded the others. Finding themselves unwelcome, the stock-brokers

were among the first to withdraw and did business at different times in Change Alley, at coffee-houses, and at the Bank of England.

The first distinctive organization took the form of a club among brokers who frequented a certain coffee-house, but the present organization of the London Stock Exchange may be said to date from 1773, in which year the exchange occupied a building of its own and adopted many of the features which now characterize it.

In New York a little later than at London the advantages of organization became apparent. The favorite meeting-place for stock-brokers in the early days was near a buttonwood tree which stood in front of 68 Wall Street; and in 1792 the brokers entered into an agreement in regard to the rates of commissions to be charged on stock transactions. It was not, however, till 1817 that a comprehensive organization of the New York Stock Exchange was effected.

In every other country, as well as in the United States and England, speculation took the organized form as soon as the stage of evolution was reached at which trading in stocks and securities became of any considerable importance; and the history of the stock exchanges is the history of the modern financial system. In their early days they were occupied principally with the large increase of public debts and the wars that made them necessary. At the time of the Napoleonic wars, Nathan Mayer Rothschild was a prominent member of the London Stock Exchange. The anecdote is often told of how he witnessed the battle of Waterloo, and, after assuring himself that the Allies were victorious, secured a boatman who took him across the English Channel with such expedition that he arrived in London in advance of all others from the scene of war, and was able to avail himself of his knowledge of the issue of the battle in making advantageous trades upon the stock exchange.

In this country the Civil War, with its far-reaching

effects upon commerce and finance, was an important event in the history of the exchanges. The period of the war was a time of great expansion of organized speculation; and the speculative spirit engendered then has continued to the present day and is among the factors which have made this country the one in which speculation in stocks most widely prevails.[1]

The great work of Wall Street, however, has lain in the development of the producing power of the country; and at every stage, the speculative markets have occupied a prominent place. First the application of steam power to navigation resulted in a wonderful development of commerce and the formation of numerous companies. The completion of the Erie Canal in 1825 further accentuated this development, and helped to increase the importance of New York as a commercial centre and a speculative market. The great growth of the banking business about the time mentioned and the trading in bank stocks which ensued was also a prominent feature of speculative dealings.

When the building of railways was begun, Wall Street may be said to have entered into its most important work. Whether the activities of the speculators were for good or ill, the history of organized speculation during the greater part of the nineteenth century is most intimately associated with the development of the railway system. Later the organization of industry by combining widely separated interests has to some extent usurped the attention which had before been given to the stocks of railways; and the wonderful activity of Wall Street in the early part of the twentieth century has been closely associated with the trading in industrial securities.

In European stock exchanges the financing of transportation and industrial companies has not been so prominent at any time as in this country. Among the reasons for this difference is the fact that machine production and the large

[1] *Cf.* Bryce, *The American Commonwealth,* vol. II, chap. CVII.

corporations necessary to it are not so important as in America. Furthermore, railway lines do not take the place of ordinary highways to the extent that they do in this country; and in Europe railways are more frequently built and operated by governments. Also, the supply of capital has been so great that it sought an outlet in other lands, so that organized speculation in Europe has concerned itself more especially with securities of different kinds originating in countries of backward development in out-of-the-way parts of the world, and the fluctuations in commerce and production in those countries have been quickly reflected in the European stock exchanges. For instance, the Baring panic upon the London Stock Exchange in 1890 had its origin in unfortunate financial conditions in Argentina. The European exchanges, moreover, have continued to pay great attention to the funded debts of different nationalities. And the issues of war and peace, the rivalries of dynasties and the alternations in military and naval supremacy of the different nations furnish the explanation for most of the important events in their history.

There appears to have been an even less degree of realization of the possible future course of evolution in the early commodity exchanges than in the first type of the modern form of stock exchange. In those exchanges the development of which can be traced to early times, it is found that the idea of a speculative market did not exist at first, and that the facilities for organized speculation were added to other methods for furthering commerce in an already existing association. Even at the present day we find in some cities that the terms "Board of Trade," "Chamber of Commerce," and "Produce Exchange" are applied to associations which have no speculative market and which exist only for developing local industries and commerce; while in other cities these names are applied to associations in which the speculative element overshadows all others.

The inconveniences to which our forefathers were sub-

ject, because of the lack of organization in the process of fixing the prices of commodities, can scarcely be realized. At present any man may enter an exchange as a member or through a broker and become a market factor to the extent of the amount of the commodity which he is willing and able to carry. The condition that prevailed before exchanges assumed their present prominence offers a pitiful contrast, when it is remembered that formerly the small dealer was at the mercy of the great magnate or merchant, with no system for giving dealers of his class any voice in determining the flow of commerce. How could any man know what price to place upon wheat, for example, at a time when famine prevailed in one province and a surfeit in an adjoining one, and when there were no systematic arrangements for utilizing the few facilities for communication and transportation that were at hand? Prices in the early days could not at best have been other than the haphazard guesses of those who were not experts and who had every facility for taking advantage of the weaker commercial units. There is some excuse, then, for the fiats and decrees of governments in early times in fixing prices, as the facilities were lacking for scientifically fixing them according to true commercial standards.

The Chicago Board of Trade, which is the most important exchange for trading in commodities, was incorporated by the State of Illinois in 1859; but the present form of trading had not developed at that time. Indeed, it is said that the present system came into existence as an outgrowth of the method of contracting for supplies used by the Government during the Civil War. For instance, a party would enter into a contract with the Government to deliver a certain quantity of pork; and this contract would afterwards become the object of speculation. But whether the contracts of the Government played an important part or not, the obvious convenience of the system which was finally evolved would doubtless have caused its adoption

sooner or later in any case. The evolution was a rapid one, and, by the year 1869, a statement of rules for the system that now prevails upon the Chicago Board of Trade made its appearance. By 1870 the system had become fully established, not only in regard to those commodities traded in upon the Board, but in respect to others as well.

The origin of the New York Produce Exchange can be traced to the Dutch occupation in colonial days. But the organizations which were the forerunners of the present one had different names and were different in most respects from the modern exchange. In general it may be said that the commodity exchanges have had much the same evolution as the Chicago Board of Trade, except such of them as were formed after the present type had been developed. The New York Cotton Exchange, for instance, was not incorporated till 1871, and the New York Coffee Exchange not until 1885.

The commodity exchanges having developed and assumed the modern form later than the stock exchanges, it is found that organized speculation in commodities has played a comparatively unimportant part in the history of commerce. This speculation is intimately connected with the development of the modern system of handling commodities which became necessary as a complement to the introduction of transportation by rail and communication by telegraph. There are no striking events in this gradual evolution, however, and we must pass at once to a discussion of the features of organized speculation as it exists at present.

CHAPTER I

FEATURES OF ORGANIZED SPECULATION

REFERRING to the definition given in the Introduction, it would appear that the activities of the speculator need not be essentially different from those of any other business man, and that the contracts he enters into must have the same general characteristics as other business contracts. The outward appearances, however, and the forms and methods used upon the exchanges seem so strange to the novice that it is necessary to describe them. In this description the attempt will be made to keep ever before the reader the essential identity between exchange transactions and those made upon the outside, merely pointing out in each case the appearances which make them seem so different.

The Commercial Exchange

It is the united action of the officers and members of the exchange in establishing and enforcing rules and regulations which constitutes the organization of speculation. The contracts made upon the exchanges have reference to commodities and also to stocks, bonds, and other securities. Most exchanges have specialties. One, for instance, may organize for dealing in grain and provisions, another in stocks and bonds, another in cotton, and so forth.

In order that a commodity may be suitable for organized speculation, it must be capable of being preserved for a reasonable length of time, and of being graded or described with sufficient accuracy so that it can be referred to in speculative contracts. These requirements serve to illustrate the peculiar nature of organized speculation, which is

principally concerned with the prices of a given kind or quality of commodity and not primarily with the price of a specific lot or package. It is true, there may be speculation in a specific article. A curio, a piece of real estate, or a horse, for instance, can be purchased for speculation; but it does not pay to organize the speculation in such commodities. The specialization involved in organized speculation upon the commodity exchanges is so thoroughly centred in the question of prices of the different groups of commodities that the speculators have little time in which to consider the points of value which belong distinctively to a particular article, or to concern themselves with the business details of preserving rapidly perishable commodities.

Furthermore, it is necessary to have in store a considerable quantity of the commodity speculated in, and the warehouse receipts used in making deliveries upon speculative contracts must call for commodities of a certain grade, the quality in each case being considered uniform throughout. The grading that is necessary, in order that a commodity can be speculated in, is often a matter of much difficulty; and, as will presently be shown, various expedients are adopted in order that the amount of commodities in store may be sufficient for the deliveries needed in speculative markets. Several important commodities, such as wheat and corn, are capable of being graded so as to fulfill the requirements; but the number of commodities that can be traded in according to the system that prevails upon the exchanges is limited.

Organized speculation has its *raison d'être* in fluctuations in prices. Therefore a commodity that by law or custom is not the subject of fluctuations would not be suitable for speculation. Such commodities could not be speculated in with profit, and speculators in them would not be performing a service.

In all important exchanges the trading is restricted to certain members or other persons who are carefully desig-

nated. To be a member and to have the right to trade or to have one's representative on the floor is considered a privilege of great value, and the profit arising therefrom is so great in some exchanges that a large price is often paid for membership.

The exchange is a voluntary organization, although its methods of doing business are always more or less regulated by governments. The amount of this regulation varies in different countries; and it will readily be imagined that it is more important upon the Continent than in England or the United States. In the Paris Bourse, for example, those who constitute the Parquet, or original part of the exchange, resemble officers of the Government in their appointment and their status. But the facilities that are created by bringing together the different interests are most of them due to the enterprise of the exchange members in coöperating for their mutual good.

The form of organization is quite different in the various exchanges. The New York Stock Exchange is not incorporated. On the other hand, the Chicago Board of Trade and numerous other exchanges in this country have been duly incorporated by the several states in which they are respectively located. There are in most cases a president, a treasurer, a secretary, a board of directors or governors, and a number of committees, and these officials have charge of the several activities of the exchange.

It is usual for an exchange to have a very wide sphere of action; and its officers and members enter into a number of matters not considered by the ordinary association or corporation. Particularly they supervise contracts between members, and declare the kind of contracts that may be made upon the exchange and the manner of enforcing them. Thus the New York Stock Exchange decides on the question of whether a given stock or security may be traded in; and when a particular issue of stocks or bonds is accepted for trading, it is said to be "listed" upon that ex-

change. It decides also in regard to the manner in which certificates of its listed stocks must be engraved and issued, in order to prevent any possible forgery of certificates or over-issue, and in every way serves to facilitate and make safe the trading that takes place within its walls.

In a commodity exchange the management decides on the kinds of grain or other commodities which shall be regular delivery on contracts, also on the place at which such commodities shall be stored and what kind of warehouse receipts shall be accepted in making deliveries. It considers freight rates, storage and switching charges, and it enters in many other respects into the minutiæ of the contracts.

An exchange frequently prescribes the charges or commissions of its members and those within its control, and hears complaints from those who believe that they have been defrauded by its members. In some cases it goes so far as to punish members by fine, by suspension of the privileges of the exchange, and even by expulsion from the organization.

The business of an exchange generally takes place in a large room or exchange hall, different parts of the room being used for different kinds of transactions according to the rules and customs established. In a grain exchange in this country the transactions for future delivery are usually made in a structure called a "pit," which is built upon the floor of the exchange hall. This pit consists of a number of steps or stairs arranged in such a way that the brokers can stand upon them facing one another in an approximate circle. There may be several pits, each for a different commodity, as wheat, corn, oats, or provisions. The commodities sold for future delivery in the pit are graded, certain grades being good delivery according to the contracts entered into and the rules of the particular exchanges. Transactions by sample are made around tables which are placed about the room and on which are displayed samples

of different cars or lots of grain or other commodities. It is not customary, however, to trade in stocks or securities in a pit. In the New York Stock Exchange posts are provided which designate the headquarters for trading in each of the several stocks and securities.

The Method of doing Business

The method of doing business by shouting and gesticulating is the outwardly noticeable feature of a commercial exchange. As the visitor first looks down from the gallery upon the mass of seemingly insane human beings upon the floor of the exchange, he is frequently heard to remark that he cannot see how they can ever understand one another or make anything out of it. Yet it is necessary, in affording a perfectly free market, that a trader have a right to make any proposition that he wishes regardless of the activities of others. Hence, in an exchange, etiquette is waived; and any one feels at liberty to interrupt any one else, and to shout his proposal at the top of his voice in the effort to drown out the others.

Perhaps the easiest way of explaining this method of doing business is by comparing it with the manner in which an auction is conducted.[1] The difference lies in the fact that on an exchange there is not merely one auction being conducted at one time and place, but several are actually jumbled together in a kind of medley or composite auction, as it might be called. One trader may be auctioning off a parcel of wheat. But if he does not immediately accept any of the bids made, little attention is paid to him till he is willing to make some concession or till the situation changes; for the others are themselves conducting auctions or bidding at them, all these bids and offers being intermixed according to the different proposals made by the parties. Some are seeking to buy, some are seeking to sell;

[1] *Cf. Annals of the American Academy of Political and Social Science,* vol. XXXVIII, p. 5.

and each is striving to make the trade that he wishes regardless of the activities of others. The result of this method of doing business is all the confusion and shouting which those not to the manner born consider so extraordinary. Dignity and decorum are little heeded in this mass of struggling traders; and the etiquette usually observed among business men is sacrificed in order that the purpose of a commercial exchange may be accomplished.

The facilities of a commercial exchange converge toward the exchange hall or room in which the trading is done, and every arrangement is made for communication with the outside. Telegrams are received directly in the exchange, and many of the brokers are connected with it by private wire or telephone. With few exceptions no one is allowed in the exchange hall except the members and telegraphers, messengers and other employees of the exchange and of its members.

The hours for doing business are at the active business hours of the day when banks and other financial institutions are open and officials and others can be consulted. Thus the regular session of the Chicago Board of Trade takes place between 9.30 A.M., and 1.15 P.M., and that of the New York Stock Exchange is between 10 A.M. and 3 P.M., except that on Saturdays the closing is at 12 M. All transactions made at any other time than during the regular exchange hours or at any other place than in the exchange are called "curb" transactions, and are forbidden by its rules. The reason why they are given that name is because at times much irregular trading has been done by crowds or knots of brokers standing upon the curbstone in the street or upon the pavement. Hence to the exchange habitué the word "curb" is associated with any trading that does not take place in the exchange hall during the time fixed for regular trading by the rules of the exchange.

In the morning, as the hour for the opening of the session approaches, the members congregate in the exchange hall,

but wait for the exact time fixed by the rules before any deals are made. When the time arrives, the signal is given and the trading begins. The opening is especially important, as conditions are quite likely to have changed since the preceding session, resulting in even more uncertainty than usual in regard to the next quotations. Upon the Chicago Board of Trade the uncertainty and resulting confusion at the opening are so great that generally no one price can be fixed upon as the opening one in the case of wheat and other active commodities; but a range is quoted between different transactions simultaneously made. Such a range is sometimes quoted as the opening of especially active stocks upon the New York Stock Exchange.

The opening having been made, the market usually becomes quiet, except that there are irregular fits and starts of activity which may occur at any time, and any of which may develop into a boom or panic. But the mid-session is usually more quiet than the opening or close. As the close approaches, each broker and trader is careful to be in position to note all circumstances and exercise his influence to make the close what he wishes it; for the closing quotation is the price to be considered by all interests till the opening next day. Until the next session there are no dealings except the prohibited curb transactions.

The Orders

The speculator or investor, having arrived at a conclusion in regard to the market, gives his order to a broker, who either acts directly or through his representative in the exchange. The system of communication is so excellent, and the method of doing business is so facilitated, that the order can be executed in a remarkably short space of time. For instance, suppose the order be to buy 5000 bushels of contract wheat for delivery at such time during the month of May next following as the seller may deem expedient, at $97\frac{3}{8}$c per bushel. In making the bid, the

broker simply shouts, "Buy five May at three eighths" — all the rest being understood. If another broker wishes to accept the bid, he simply says, "Sold"; or he makes a gesture or nod signifying assent, and the deal is made. This quickness in executing orders by abbreviated speech and the use of the telephone and telegraph is necessary in order that a trader may not be anticipated in a favorable transaction by some one more alert. Things are done quickly upon the speculative exchanges.

An order given for execution at the market must be executed at the best price obtainable at the time the order is received. In case the broker has such an order, he makes a bid which he thinks the best that would have any chance of acceptance; but if the proposal be not accepted, he makes a less advantageous one or accepts some offer from others. Often the market will remain for several minutes at a certain point at which considerable trading takes place. In this case the broker's duty is simplified, for he can usually find some one who will make a trade at the going price. But at other times the market is what is called "sellers"— that is, there are sellers at a certain price, but no bidders except at a lower price. Or the opposite may be true; and there may be buyers at a certain figure, but no sellers. These conditions of the market, which, by the way, are the usual ones, call for care on the part of a broker in executing orders; but he has no discretion, and must deal on the best terms he can if the order be for execution at the market.

Other orders are resting or waiting orders on which a limit is fixed for execution. For instance, a broker may receive an order to buy 100 shares of a certain stock at 95 or better. In that case he waits till the trading nears 95, and then bids that figure till he executes the order or until the market moves so far away that bidding would be futile.

"Stop loss" orders constitute another form of orders for the execution of which the continuous market of the exchanges gives every facility. A stop order is different in

one important respect from the example of a waiting order just given. It is intended to stop losses at a point beyond which the trader is not willing to run the risk of a further adverse movement. Thus, let us suppose that a trader be the owner of a certain stock, and that he prefers to have his stock closed out at 87 rather than run the risk of a decline below that figure. Accordingly he instructs his broker to stop his loss by selling his stock when 87 is reached. The broker may not be able to sell the stock at exactly the figure designated; because, to continue with the illustration just given, the market may pass 87 so rapidly that nothing can be done until say $86\frac{3}{4}$ is reached. However, in the continuous market afforded by the exchanges such an order can usually be executed at the limit fixed. Only the merest approach to stop orders can be found in business outside the speculative exchanges, as a continuous market is necessary to execute them.

Other forms of resting or waiting orders than those mentioned are orders for execution at the opening or close, or, for instance, at 10 o'clock or at 12 o'clock. A trader may fix any limit that he wishes for the execution of his order.

Somewhat similar to stop orders are hedging orders; for a hedge is intended as a protection against loss. But a hedger does not necessarily wait till a deal has gone against him before putting on the hedge. Strictly speaking, when a speculator or investor hedges, he enters into a deal of a different nature from the original one in the hope that, in case the original deal shows a loss, the hedge may show a profit. One stock, for instance, may be bought as a hedge upon a deal in another stock; or a commodity may be bought or sold as a hedge. There are thousands of schemes for hedging, some of which are useful and some of which are fallacious; and the orders that result from them affect the supply and demand for commodities and securities upon the exchanges. Thus hedging orders on grain powerfully

affect the Chicago market, as Chicago has the broadest grain market and consequently the best opportunities to place hedges. At the time of marketing grain, for instance, a great deal of selling is done in Chicago as a hedge on purchases made elsewhere; and hence the supply is affected and an important influence upon prices exercised.

Fraudulent orders are also to be considered. A trader may give out orders to one broker to buy a stock and orders to another broker to sell the same stock under such conditions that both the buying and selling orders are likely to be executed at the same time. The principal in the case supposed may as a result be selling to himself through different brokers; and the orders that he gives to bring about this result are called "matched orders." A sale in which a trader sells to himself through matched orders given for manipulative purposes is called a "wash sale," and such a transaction is of course a fictitious one.

The purpose of giving matched orders and of making wash sales is to make quotations which a manipulator may desire, and so to move a market either up or down with a minimum of loss to the manipulator. For instance, suppose that Union Pacific be selling at 180 and the order be given to sell 100 shares of the stock at 179 and to offer it down to that figure, while another broker is given an order to buy 100 shares at 179. The broker who has the buying order would bid 179. But no one under the conditions supposed is likely to accept the bid except the broker who has the selling order; and, when he accepts it, the quotation is made and goes out at 179, and the stock is said to have been "marked down" to that figure. Since the manipulator both buys and sells at 179, it will readily be seen that he suffers no loss except such commissions as he may pay.

It appears to have been the intention of the founders of the New York Stock Exchange and of other exchanges that the members were to act only as brokers for others. But at the present time there are many members of the exchanges

who trade principally for themselves. Upon the New York Stock Exchange these are called "room-traders."

In the London Stock Exchange a system prevails whereby some members are classified as dealers or jobbers and others as brokers. Upon that exchange the brokers do not execute their orders directly with other brokers or traders as at New York. But the broker who has received an order to buy or sell a certain stock seeks out one of the jobbers or dealers just mentioned and ascertains from him the prices at which he will trade. The jobber usually names two figures — one at which he will sell and a certain lower price at which he will buy, either one of which proposals the broker is at liberty to accept according to the nature of his order.

In all forms of exchange trading, the very fact that many of the trades are executed by persons other than those who run the risk of them makes the question of brokerage or agency important. If all deals were made personally by the traders who originate them, the business of the exchanges would be to an extent simplified. It is necessary, therefore, to become acquainted with the system of putting in orders and of executing them in order to understand many of the vagaries of the market.

Distributing Quotations and News

When a transaction is made, the quotation is at once sent out by a remarkably developed system. There are those in attendance who understand the abbreviated forms of speech and the methods used in this kind of trading, and hence are able to give the quotations to the telegraphers as fast as they are made. The brokers and traders also help in informing the telegraphers of any deals that may have escaped attention, thus making the quotations complete. In the broker's office the quotations are received by a telegrapher, who places them upon a blackboard where all can see them.

There is also another service whereby the quotations are printed by a little mechanism called a "ticker" upon a long strip of paper called the "tape." This apparatus dispenses with the telegrapher at the receiving end, and is commonly used, not only by brokers, but by hotels, restaurants, and clubs whose members wish to be informed of changes in values. The wide extent to which such quotations are thus disseminated is remarkable.

Besides the quotation ticker above described, there is the news or gossip ticker which prints the news in regard to speculation and the course of trade. The collection and distribution of news, it may be mentioned, is one of the most important functions of the speculative exchanges, and the organization of speculation gives encouragement to those who collect and disseminate it.

The agency, however, which is the most important in distributing the quotations and news bearing upon the market is the periodical press. All periodicals except those devoted to the interests of some specialty of a totally dissimilar character give much space to organized markets. Elaborate reports covering the fluctuations and news from the exchanges are prominent, and editors are specially employed to write articles giving opinions of market movements and making predictions in regard to future fluctuations.

The organization of speculation shows itself characteristically in the development of the facilities for communication just mentioned. No other business is organized in this manner. A trader upon an exchange may travel throughout his country and everywhere receive intelligence in regard to his business. He has but to look at the ticker which he finds so widely distributed or to purchase a newspaper in order to find news, quotations, and opinions. The business done upon the exchanges is the best advertised of any, and the publicity which exists in regard to it assists greatly in making a free market.

Organized speculation thus marks the culmination of the inventions for the gathering and disseminating of intelligence in regard to commerce. It is different from any of the others, yet it utilizes them all. The railroad, the telegraph, the telephone, the mail service, and other modern inventions and institutions are the constituent units or members which are finally united into one system with organized speculation as the principal factor.

The quotations and intelligence of a particular exchange are not only communicated directly to the brokers and traders who deal in it, but to other exchanges as well. The grades of the different commodities traded in vary with the different exchanges, and of course the freight or carriage must be allowed for in calculating the values of commodities at the respective locations. Notwithstanding these and other conditions which must be taken into consideration, the markets sympathize with one another, and in most cases move in harmony. This is accomplished through the excellent system of distributing quotations, and the trading which grows out of it. Those who thus keep the different markets in line are called arbitragers. Their function can best be illustrated by a practical example.

Let us suppose that upon the Chicago Board of Trade a cablegram is received announcing that the market for wheat at Liverpool has declined. Unless the arbitrager has reason to believe that the cause of this decline is a local matter peculiar to the Liverpool market, he feels that relative values in the two commercial centres should remain the same; and he reasons that it is probable that, through diminution of shipments from this country to the United Kingdom or from like causes, the two markets will ultimately be brought into line. But it is the business of the speculator to look ahead, and he sees here a chance to make money by trading on the probability that prices upon the two markets will resume their former proportion. Thus the arbitrager, acting through his own selfish interest, yet with

as useful a commercial purpose as any, proceeds to buy wheat in the Liverpool market and sell it in the Chicago market. But the buying at Liverpool increases the demand at that place and so has a tendency to put that market up; while the selling at Chicago increases the supply which there presses upon the market, and of course tends to depress the price at that place. The buying and selling of the arbitragers and speculators in the manner just described are so effective that proportionate prices between two markets, in case they get out of line, are generally quickly restored. Hence the speculator in these arbitrage transactions anticipates changes in value and buys and sells in order to take advantage of them; only in this instance it is not changes in specific values that the speculator is forecasting, but changes in relative values between two markets.[1]

In arbitrage dealings the smallest fractions are considered, and the time necessary to complete such transactions is so reduced that two markets may move in almost exact harmony. If they appear to get out of line for any appreciable length of time, all traders look to local changes in supply and demand as the cause, and come to consider the new proportion established as the proper one. In arbitrage upon grain and other commodities the varying freight rates, the local conditions, and technical position of the market must be kept in mind. As regards stocks and securities, however, these complications are not so important; hence, as a result of arbitrage, stocks that have a wide market should have, and do have, substantially the same value the world over; for the cost of transporting either stocks or money or of dealing in exchange is inconsiderable when any but the smallest transactions are undertaken.

To sum up: the system of distributing news and quota-

[1] For the view that arbitrage is not speculation but trade, see Emery, *Speculation upon the Produce and Stock Exchanges of the United States*, p. 138.

tions brings together upon an exchange the transactions of widely separated traders, and the rapid communication between the different exchanges gives special prominence to modern methods, so that all exchanges move substantially as one in the making of prices. Commerce is thus unified, unfortunate differences between localities are ironed out, facilities for information and trade are thrown open to all, and the possible unfair advantages which one community might secure over another are to a great extent curtailed.

Describing the Market

Organized speculation has its peculiar language which is employed in describing the market; but the technical terms are not usually from Latin or any other classical tongue. On the contrary, many of them are derived from the language of the street or from slang. Some of these terms have been already defined, but it is necessary to give the meaning of others in order that subsequent explanations may be understood.

The familiar terms "bull" and "bear" are explained and easily remembered by referring to the habits of the animals from which the terms are derived. A bull is always seeking to toss things upward with his horns. Hence those who seek a rise in the market are called bulls. But the habits and tendencies of a bear are quite different. He is always pulling things downward with his claws. Hence it is especially appropriate that those who seek to pull down prices are called bears.

The words "bull" and "bear" are not used in their commercial sense in outside business, but there are bulls and bears everywhere in trade. The business man who needs a horse, for instance, is extremely bearish in his talk. He is a bear on horseflesh because he is seeking to purchase, and his interest lies in depressing the price. Hence he depreciates his neighbor's property in much the same way that the bear on the speculative exchange seeks to depress values. But

when a man has a horse which he bought for speculative or other purposes, he is likely to become a pronounced bull; and property that he may have recently been depreciating has now become of great value and is highly extolled. Human nature is the same upon the exchanges, but the organization and bringing together of large numbers of traders make the characteristics of bull and bear more prominent than in outside trade. Not only are the words used in the sense above described, but adjectives are formed from them. Thus, when a market shows a tendency to go up, it is said to be "bullish"; but if the tendency be downward, it is said to be "bearish."

An upward movement of a market accompanied by great excitement and speculative enthusiasm is called a "boom." A panic, on the contrary, occurs when speculators lose confidence and numbers of them seek to sell at the same time, causing demoralization and a great fall in prices. When a market fluctuates within narrow limits, it is said to be "choppy." If a market does not seem to have any well-defined tendency, but moves with eccentric fits and starts, — some securities or commodities advancing, and others declining, — it is said to look "spotty" or "spotted." When a market shows a tendency to go up, it is said to look "strong"; but if it seems inclined to fall, it is said to look "weak." A "bulge" is a sudden bull movement; but a "slump" or "break" is synonymous with a decline.

In describing the distance that a market moves, the word "point" is often used. In securities it means one dollar per share of stock, or one per cent on the par value of a stock or bond; in grain one cent per bushel is meant; while in cotton, a point is one hundredth of a cent. The word "point" is also used as synonymous with "tip," or advice to buy or sell a stock or commodity.

A "syndicate" is a group of capitalists who unite their resources to accomplish some financial or business object. A "clique" or "pool" is much the same as a syndicate,

except that in the speculative markets the terms are usually used in describing a group of speculators who are seeking by uniting their interests to manipulate the market.

Margin Trading

The practice of leaving a deposit of money to bind a bargain, and as security for faithful performance of a contract, is so common in all kinds of business as scarcely to need comment. In real estate transactions, the value which a property has over and above any mortgage is called an "equity." When chattels or other property are bought, partly for cash, partly on time, the cash payment is called in book language, "earnest money"; or, in common business colloquialism, it is said that the buyer has made a certain "payment down." The balance in such a case may be paid in installments, or the seller may retain his lien upon the property indefinitely, according to the terms of the particular contract entered into.

In the parlance of the exchanges, however, when a trader buys partly for cash, partly on time, the amount of money which he puts into the deal is called a "margin." The name is all that differentiates it from a similar deposit in numerous forms of transactions entered into, in all kinds of outside business every day. There is no difference in principle between margin trading and those other forms of business transactions, but, upon the exchanges, the margin deals are much more frequent, and the margins necessary are much smaller than are required elsewhere. A broker in stocks, for instance, will take trades for a client for ten per cent margin or even less. After purchasing a stock on the small margin mentioned, he will hypothecate it; but the bank, in making the loan, will lend him only about eighty per cent of its value. Thus the margin which the bank requires is, say twenty per cent, or roughly speaking double, even more than double in many cases, what the broker gets. The brokers and commission men are thus

seen to have a system of making transactions with the smallest of margins or security. This is one of the important features of dealing upon the exchanges which will be referred to later; for, though the principle of margin trading is seen everywhere in business, the size of the margin has the most far-reaching effects.

Future Delivery

In general business, when a purchase is made, delivery may be immediate or it may be put off until a future time. A contract in which the delivery is deferred may be undertaken from a variety of reasons. Thus the seller may not have the goods ready for delivery at the time the contract is entered into, or they may not even be in existence at that time, or the buyer may not be ready to receive them. For instance, a builder agrees to deliver a building to a party within a certain specified time. At the date of making the contract, he may have none of the materials, machinery, or labor at hand; but, after the contract is made, he executes it by buying the necessary supplies and hiring the necessary labor. There are many other kinds of business like that of the builder, in which it is customary to make the goods after they are sold. Referring to merchandising, there are many kinds of merchants who make a practice of selling goods before they are purchased from the wholesaler.

Upon the speculative exchanges we have practices somewhat similar in their nature. There are the cash or "spot" transactions, in which a commodity or security is delivered soon after the contract is made; and we have "future" transactions, in which delivery may be deferred to a more distant period. The time that may elapse before delivery is different in different exchanges, and there is a latitude in the particular terms that may be agreed upon by the parties. In the New York Stock Exchange, in the case of a regular transaction, there is delivery upon the next day after a trade is made. On the European bourses an account

system prevails among brokers, a period of time, as a fortnightly period, being fixed for settlement, in something the same manner (waiving particular customs and technicalities) as the first of the month is often regarded as a day of settlement in other kinds of business in some parts of this country.

In the dealings in commodities upon the speculative exchanges, while the delivery is no different in principle from any other form of future delivery, it is usually for a period of time computed in a different manner. Instead of buying grain to be paid for, say on the first of the month or on sixty days' time, the speculator usually buys what is technically known as a "future." Thus the speculator buys wheat to be delivered some time in September at the seller's option. Yet such a contract is no different in its essence from any contract for delivery at a future time in any business, except that, instead of delivery being made on or before a certain specified day, it is to be within certain hours on any business day in the specified month.

An "option" is a contract in which the buyer or seller has some choice as to whether he shall perform the contract or as to the terms under which it may be performed. The most common use of the word is as a synonym for the term future. Thus, when it is said that a trader has sold the May future or option, the meaning intended is that he has sold a certain commodity, as 5000 bushels of wheat, for delivery in May. The option lies with the seller as to the time in May at which he shall deliver. It is not allowable to deliver before the month of May has arrived, but he must deliver at some time during that month on or before the last business day.

The form of option just mentioned is not used in stock transactions, but it is allowable, for example, upon the New York Stock Exchange to trade in buyer's and seller's options to deliver stock for not less than four nor more than sixty days. To take an illustration, let us suppose

that 100 shares of a certain stock be sold at 107 "seller 30." Such an expression means a contract whereby the seller must deliver the stock within thirty days of the time that the contract was made, and that he may deliver it on any day within the thirty days at his option. The buyer's option is the same as that of the seller's option just mentioned, except that the buyer may choose the time within the specified period at which the contract is to be executed.

Short Selling

"Short selling" occurs whenever a party sells something for future delivery which he does not own at the time when the sale is made. Here, as elsewhere, it is principally the name which differentiates the proceeding which takes place upon the exchange from other business. Thus, if we apply the term "short seller" to the builder who sells the building before it is built, it would be difficult to point out any essential difference between such a transaction and a short sale on an exchange. But in organized speculation, short sales are almost as common as purchases for long account. A perfect system has been developed so that the bear may sell before he buys just as easily as the bull may buy before he sells. In the pit no one inquires whether a broker who is offering to sell wheat owns it at the time when the sale is made. If a trader wishes to buy at the price mentioned, he accepts the offer; the trade is entered on the cards of the parties concerned, and passes on to the clerical force to be settled by actual delivery or the payment of differences, according to the wishes of the principals in the trade.

Such is the facility with which short sales are made that the term itself is hardly used among traders and brokers. The client simply tells his broker to sell, if he wishes a short deal made, or to buy, if a bull deal is desired, and a trader, who is buying and selling all day, may not know exactly

how his trades are to be made up; for, when he receives his statement, he finds one column for purchases and another for sales, with the dates of course mentioned, but with no memoranda as to whether the deals were originally made for long or for short account.

Yet the very facility with which the short sales are made upon the exchanges puts the short seller in the speculative markets in a very hazardous position; for it is obvious that, where large contracts to supply a certain stock or commodity are made, there might come a time when these numerous engagements could be executed only with difficulty. When the supply of the actual commodity is limited and when the anxious shorts are bidding for it, in order to close their contracts, we have the condition of the market which is called a "corner." The market for any commodity outside the exchanges can be cornered. But in outside business there is not this unwieldy mass of short sellers to force up prices with a terrible rush. Those who sell buildings in advance, for example, know that there is little likelihood of the market for building materials being cornered. The price may be raised before the builder is ready to buy, but he has little reason to expect an oversold market; and any combination that might appear would concern itself rather with getting permanent control of the market than in attempting to squeeze any one by sensational or violent fluctuations. All of these questions, however, will be referred to later.

The fact that the short seller is so prominent upon a speculative exchange results in an abbreviated nomenclature to designate him and his opposite. Thus a trader who has made a short sale is called "a short"; and one who has purchased expecting a rise is called "a long." When a short seller wishes to close his contract, he makes a purchase which is called "covering his short." When, on the contrary, a long purchaser closes his contract by selling, it is said that he "liquidates" or "unloads"; and when a

clique or syndicate finally disposes of a mass of securities that they have been marketing, it is said that the securities have been "distributed" or "digested."

Borrowing

Let us suppose that a customer comes to a hardware merchant and asks for a particular kind of hammer, and the merchant finds that he does not have the exact article wanted in stock. When such a case arises, the merchant frequently offers to send to the wholesaler, or perhaps he will say he might "pick it up around town." The merchant then goes to one of his fellow dealers, tells him he has an order for such a hammer, and asks if he can borrow one; promising to return a precisely similar hammer at a later time. The proposal being assented to, the merchant receives the hammer and delivers it to his customer in the regular course of business. He then orders a stock of the hammers from the wholesaler; and when they arrive, he hands one of them to the merchant from whom one was borrowed and thus pays the loan.

There are different methods by which a merchant who has sold an article that he does not own may settle the transaction, but in the illustration above given, one method is called to mind by which such a transaction is sometimes adjusted. Upon the New York Stock Exchange, however, this method is erected into a system; and, if a trader sells a stock for regular delivery that he does not at the time own, his brokers may borrow the stock for him, using the same to make delivery. The manner in which this process is conducted upon the New York Stock Exchange is as follows: —

After exchange hours the brokers assemble for the borrowing and lending of stocks, and those who thus congregate are called the "loan crowd." When a trader has sold a stock that he does not own, his broker goes to the loan crowd and borrows the stock according to the rules and

customs of the exchange. When the loan is made, he pays the lender the market value of the stock, which remains on deposit till the loan is canceled. During the life of the loan the deposit may be changed to correspond to the fluctuating value of the stock. The terms upon which such a loan is made are usually that the lender of the stock must pay interest upon the money which he receives as security. The interest which is paid in such a case is called the "loaning rate." It varies according to the demand and supply of the stock for lending purposes and according to general financial conditions. In some cases under the law of supply and demand no interest or loaning rate is charged, in which case the stock is said to be lent "flat." In other cases the demand for the stock may be so great that the borrower of it may not only be obliged to forego interest upon the money that he has deposited, but he may be required to pay a premium for the use of the stock.

Substitution

In various kinds of business it is quite common, when the dealer receives an order, to turn it over to the manufacturer with instructions to ship direct to the consumer. In some lines of trade this practice is the usual one; while in others it is only occasionally availed of. For instance, let us suppose that a furniture dealer at Minneapolis sells a dozen chairs to a customer at Duluth, but the chairs are sold, let us say, from a photograph or blueprint, as the dealer does not carry them in stock. Now what does he do in this case? He orders the goods from the manufacturer in, say Grand Rapids, sending of course shipping instructions. He might have them forwarded directly to Minneapolis, and, after he received them, he could reship them to his customer at Duluth. But, when we remember that every time goods are handled, the expense is increased proportionately, we see the advantage of a more direct way. The method to be pursued, of course, is for the dealer to

order the goods sent direct to his customer at Duluth. Thus in such a case — and the instance is by no means an uncommon one — a merchant sells something that he does not own, which is never delivered to him and which he could not identify even if he should ever see it; and the manufacturer finds himself shipping goods to a party with whom he has never made a contract, and even, in some cases, collecting money and adjusting complaints with such a substituted party.

There are various forms which similar transactions may take. For instance, the customer might enter the show rooms of the manufacturer and ask to see his samples. But he would be told that the manufacturer did not sell to any except dealers, whereupon the customer might say he would buy from his local dealer. The manufacturer would then quote the retail price on the goods; and, on delivering the same and collecting his bill, would remit the difference between the wholesale price and the retail price to the designated dealer.

Every business has its peculiar customs and methods of adjusting trades, and any one transaction may be a little different from others; but the broad principles governing them are the same. The evolution is always towards the saving of expense in making transactions, and especially in delivering the goods. The above illustrations only show some cases where parties are substituted in making shipments and collections, and indicate how little concern there is in general trade about the parties to whom delivery is made or whether settlement is secured by the payment of differences. The method which yields most readily to the desire for quickness and saving of labor is the one most favored. The customs of the speculative exchanges in the matter of substitutions and payment of differences do not vary from outside forms of trading any more than outside forms vary among themselves. These modern methods are quite common in organized speculation; and, as will be

shown presently, a system of book-keeping is especially devised to further them.

Cancellation of Trades

The cancellation of trades as practiced upon our commodity exchanges is one of the methods whereby trading is facilitated and much of the clerical labor of settling is avoided. The system can be best understood after we have considered an example taken from a form of speculation which exists outside of the exchanges.

If the seller of a piece of land changes his mind in regard to the value of the land to him after the deal has been closed, and if the buyer also changes his mind, the land may be bought back, leaving both seller and buyer in the same position as before entering into the first deal. If this second sale occur before the transfer is made on the first, the ceremony of passing the title would be an empty one. It would be considered a superfluity for the original seller to make a deed to his grantee when it is known that the land must immediately be conveyed back to him. The best method, of course, would be to waive all ceremony as to conveying the land and make settlement by payment of the difference in price, if the second sale be at a different figure from the original one.

Transactions of this sort, which sometimes occur in an active market for real estate, are frequent among traders upon the exchanges. For instance, A might sell wheat to B, and B might resell it to A. If neither one of the parties had the wheat when the time for delivery arrived, they might find themselves at a loss as to which would be required to make delivery first. A might depend upon B to deliver to him in order that he might use the wheat in making his own delivery; while B might insist that A make delivery first.[1] Either of the parties would have an equal right to bring action at law against the other for the delivery of the

[1] *Cf.* Hill, *Gold Bricks of Speculation,* p. 379.

wheat; and neither one of the parties would be any better able to defend such an action than the other. The obvious expedient would be for the parties to settle the transaction by merely paying the difference, if any, between the prices at which the two transactions were made, as in the case of the real estate deal mentioned above.

Ringing Out

The principle illustrated above, whereby trades are canceled in case the parties place themselves in their original position by a sale back to the original seller, is customarily carried much further upon the exchanges than elsewhere. For instance, Broker A may sell to Broker B a parcel of wheat. Broker B may make a similar sale to C; and C may sell again to A. It is seen in this instance that a complete ring is formed; and there is so much buying and selling back and forth upon the exchanges that much of the business will resolve itself into rings. Many of the rings are much larger than the simple one suggested above. An example of such a large ring might be the following: —

A sells 5000 May wheat to	B
B	C
C	D
D	E
E	F
F	G
G	A

It will be noticed in this large ring, as well as in the smaller one, that the purchaser in the last transaction is the seller in the first; so that deliveries of wheat are no more necessary than in the previous illustration. It is the business of the clerical force of a board of trade house to watch the various future transactions and settle them by the payment of differences in case a ring be formed, such settlements being similar in principle to the manner in which any

conveyancer would adjust a real estate transaction of like nature.

In cases of a ring settlement, the manner of making it is more complicated than where a purchaser sells back property directly to the one who sold it to him. Let us suppose a case in which a lot of 5000 bushels of wheat is transferred between the following parties at the prices mentioned: —

A sells to	B at	81c
B	C	79
C	D	82
D	E	78
E	A	83

One way of settling the above ring would be for B to pay to A, $4050, the value of 5000 bushels at 81c, and for C to pay B his purchase price, or $3950, and so on. But it is not customary for business men to pay large sums of money to one another when the art of book-keeping offers an easier way. As a preliminary to understanding the method by which transactions are settled upon an exchange without the transfer of large sums of money and commodities, the following statement of profits and losses per bushel in the last supposed ring may be considered: —

Party	*Purchase price*	*Selling price*	*Profit*	*Loss*
A	83c	81c		2c
B	81	79		2
C	79	82	3c	
D	82	78		4
E	78	83	5	
	Total	....	8c	8c

It will be observed that the total losses and profits in this ring are exactly equal, as was to be expected, and it is only necessary for those who have lost to pay the differences to those who have made profits in order that the ring may be settled. For convenience, however, the book-keepers have a method whereby the profits and losses as above stated are

computed to a certain settling price, which price is fixed at such a figure as to make the payments of money as small as possible. The settling price is used merely as a convenience, in the same way that any other accounting device available in any particular business is adopted to save labor in book-keeping. In the description of the ring settlements as well as of other exchange practices, it is not meant to imply that all exchanges use precisely the same methods, but the accounting principles availed of in each case are the same.

It should be stated and emphasized at this point that no one may make a trade upon an exchange and at the same time declare that he does not intend to deliver the grain or other commodity, or to have the commodity delivered to him. The method of settlement by a ring and settling price is intended solely for cases in which a trader has concluded to get out of a deal before the time for delivery arrives. If he wishes to make the actual delivery or to have the delivery made to him, he is accommodated in every case.

Another important example may be brought to mind of accounting methods similar in their nature to the ringing-out process. The numerous forms of acceptances, bills of exchange, and other representatives of money are made to do the duty of material gold and to economize, to an enormous degree, the use of that metal. By a remarkable system of the payment of differences, the adjustments of both domestic and international trade are accurately made with astonishingly small shipments of actual gold. If Paris owes New York, and New York owes London, and London owes Paris, only gold enough is shipped to settle the differences in the transactions. A ring has been formed just as truly as one that is made upon the board of trade; and commerce, by its refined system of barter, allows paper representatives and promises to take the place of the material substances in terms of which the transactions are made.

Book Accounts

Among the lower forms of savages, it would perhaps be impossible to understand how a person might owe another a certain sum, and have due him a certain sum, and settle the account by the payment of the balance or difference; but it is a concomitant of civilization that some form of book-keeping or accounting makes its appearance along with the other characteristics. As civilization progresses, we find that the system of accounting becomes more and more refined, and that many forms of transactions are settled by adjusting differences on paper. A business man seldom sees gold in actual circulation; he has its representatives, and even the use of these representatives is economized.

When the speculative exchanges use the methods just referred to in settling business transactions by depending so largely upon offsets made in books of account, they are but utilizing the modern method of doing business; and, being the highest expression of the competitive system, they use book-keeping in place of more cumbersome methods even more frequently than is done in other forms of business. In outside business the amounts placed to the debit or credit of the different parties are expressed in terms of money, and the quantity of commodities as such is not usually made the subject of elaborate book-keeping. As an exception the stock-book might be mentioned, in which the attempt is made to show by book-keeping methods the stock of merchandise on hand; and accountants, in some business houses, have a system whereby barrels, burlaps, or other packages or coverings are accounted for in cases where they are not directly charged to a party. Similar instances can also be mentioned in various lines of trade.

Among members of the exchanges, we find the fullest development of the system of keeping accounts of merchandise. Listening to the talk of a grain broker and his clerks,

one will sometimes hear the "grain balance" referred to as of equal importance with the cash balance or the bank balance. Upon the European bourses, as previously mentioned, the system of carrying stocks as a book account has been more highly developed, for instance, than in New York: and the American system, which in this particular is not progressive in taking advantage of modern accounting methods, has been criticized as not affording that facility of movement in financial matters which is found in European systems, and as fraught with greater danger of panics and squeezes. But leaving aside differences in the speculative markets and the customs of particular exchanges, it is seen that the system of organized speculation avails itself more completely of modern accounting methods than other forms of business.

In settling accounts in outside business, the difference between the two sides of the ledger is called a "balance"; and oftentimes, by the payment of a small balance, large items on both sides of the ledger are adjusted. But in speculation, as when a commodity is bought for a certain figure and sold for a certain figure, the balance due frequently is called a "difference"; and it is said in adjusting the account that "differences are settled." The word difference is again called to mind in this place in order to point out that its technical meaning in organized speculation is much the same as that of the word balance as ordinarily used by a book-keeper in any kind of business.

The Clearing-House

After considering some of the numerous methods by which parties are substituted and accounts are canceled in general business, we come to the clearing-house as the place where those accounts that have not been offset or balanced in some way are finally adjusted. Here, it seems, is the very refinement of the system whereby paper representatives and book entries are made to take the place of actual

transfers. Yet here, too, we find that the organized exchanges carry the principle farther than is done in outside business. In his ordinary receipts and expenditures the grain- or stock-broker has his bank account, and deposits and draws checks as does everybody else; and the paper representatives finally pass through the clearing system of banks the same as any one's.

But in the speculative transactions made upon the floor of the exchange, it is found that the ordinary clearing system does not carry the principle far enough, and many exchanges have a clearing-house of their own, for the express purpose of clearing those transactions. The principle of clearing is carried farther in such a clearing-house, however, because all of a certain class of transactions are at once put into the clearing-house without waiting for any other method of settlement, and also because some exchange clearing-houses not only clear money items, but also stocks and commodities. The use of the clearing-house in this connection marks the culmination of the manner in which the various forms of speculative exchanges supply the freest mobility both to commodities and securities, and represents the fullest development of that refined system of barter so characteristic of modern commerce.

A Distinguishing Feature

Upon the speculative exchanges, as has just been shown, the observer finds many things which apparently are quite new and strange. He finds traders there doing things which are common with business men in many different lines; but he finds some things done so frequently that he is at a loss to understand the process. He sees the actual commodities on every hand and sees deliveries made. He notes, however, that in a great many transactions there are no deliveries; and he finds this made possible by a system of sales for future delivery whereby it becomes the easiest matter for the trader to sell goods before he buys them.

The illustrations given herein are intended, not only to help the reader understand the system, but as an argument to show that nothing in its essence different from what is seen outside is attempted upon the exchanges. When speculation is organized, the general effect is the same as that of organization in any line — effectiveness is increased. By facilitating the process and making it rapid, the volume of trading is greatly augmented. It is, indeed, scarcely believable that an enormous number of transactions can be made in a particular commodity when the actual amount of it in existence is, comparatively speaking, so small. For instance, it is not considered particularly remarkable that a grain exchange should trade in as much wheat in one week as the actual receipts at that market amount to for a whole year. Thus the commodity in stock is bought and sold over and over again; or, to speak more accurately, the right to possess it is bought and sold the enormous number of times referred to. Here we have a distinguishing characteristic of organized speculation — the great number of transactions in what is called "wind." So great is the number of transactions that many question the need for them; but, in any case, they must be reckoned with, as they have much to do with the peculiar phenomena observed.

Speculators classified

The instruments which the speculator uses and the system under which he works are not the only things which serve to show the identity of his business with other forms. Human nature, too, the personal factor, is much the same in the pit as elsewhere. But certain human characteristics are exaggerated in the trading room, and it is possible there to make a more clearly defined classification than elsewhere. The principle of classification, however, is the same. Here, as elsewhere, are to be found the people who know their business and those who do not know how to conduct wisely their own affairs. A talent for speculation is one of

the rarest gifts a man may have. A speculator, like a poet, is born, not made. But in addition to the peculiar talent for weighing elements of value, he must also have experience; and those persons who think without cause that they possess that penetrating vision which belongs to the speculator also think that they can speculate without experience. Hence the most prominent characteristic of the unsuccessful speculator is his amateurism.

In the slang of the street these amateur speculators are called "lambs." That is to say they are supposed to be persons of great innocence; and, if the fact of losing money is a proof of innocence, then it must be admitted that they are appropriately named. The lambs lose their money, which fact seems to be a surprise to many. But there is nothing to cause wonder about it. It is the same misfortune which overtakes any one who enters any business that he does not understand. But there are very few persons who are naturally adapted to speculation or have the training necessary to engage in it; and, unfortunately, it is a fascinating business and appears to be easy. Hence thousands of persons are continually rushing into it, only to meet the pitiful fate which might naturally be expected.

Ranged against the amateurs or lambs, we have the professional speculators. They occupy the same vantage-ground that professionals do in any enterprise, as they know what they are going to do and why they do it, and have provided adequate means wherewith it may be accomplished. One way in which these professionals make profit, and at the same time contribute towards the steadying of the market, is by keeping money in readiness to make purchases and then buying during a panic or depression. Thus these seasoned speculators, as a result of their knowledge and their patience, operate with profit to themselves and for the good of the commercial world. Henry Clews refers to such speculators as old men who have learned by years of experience that the time to buy is when everything

looks most discouraging. The following is his picturesque account of them: —

"But few gain sufficient experience in Wall Street to command success until they reach that period of life in which they have one foot in the grave. When this time comes, these old veterans of the Street usually spend long intervals of repose at their comfortable homes, and in times of panic, which recur sometimes oftener than once a year, these old fellows will be seen in Wall Street, hobbling down on their canes to their brokers' offices.

"Then they always buy good stocks to the extent of their bank balances, which have been permitted to accumulate for just such an emergency. The panic usually rages until enough of these cash purchases of stock is made to afford a big 'rake in.' When the panic has spent its force, these old fellows, who have been resting judiciously on their oars, in expectation of the inevitable event, which usually returns with the regularity of the seasons, quickly realize, deposit their profits with their bankers, or the overplus thereof, after purchasing more real estate that is on the up grade, for permanent investment, and retire for another season to the quietude of their splendid homes and the bosoms of their happy families." [1]

Besides the retired business men just described, there are, of course, the younger men at present taking an active part in financial affairs, who also have money on hand to make investment when opportunity offers. These men are among the most useful factors in the speculative markets and commerce in general, as their business operations tend to prevent the development of any kind of commercial mania.

Another class of professional speculators is composed of those who "scalp" the market, which means that they trade frequently, and endeavor to catch the smaller movements, being contented with a profit as small as an eighth

[1] Clews, *Fifty Years in Wall Street*, p. 14.

or even, as upon the Chicago Board of Trade, a sixteenth of a cent. Scalping is by no means peculiar to professional speculators, as the lambs are usually scalpers. But obviously the lambs cannot make money by scalping, as they must pay commissions. Commissions on the exchanges, though proportionately very small when compared with other commissions, are yet large when compared with the very small profit which the scalper takes. Thus, if he makes a gross profit of half a point, and his commissions for the round turn are one fourth of a point, his expenses are fifty per cent of his gross profit. Few businesses can be profitably conducted with such a large ratio of expense; and here we have one of the reasons why the accounts of the lambs make such a poor showing.

But the professional scalper is a member of the exchange, does his own trading, and pays no commissions. He is on the floor or in the pit, sees the orders come in, knows the different brokers and the kind of customers they have, and hence is able to make some estimate at first hand of the character of the buying or the selling, as the case may be. Some of these professional scalpers succeed; and it is desirable that there should be scalpers to equalize the market and prevent it from responding to every gust and eddy of speculative excitement or exaggerated news.

Besides the kinds of speculators mentioned, we have the professional speculators, of which, unfortunately, there are too many, who depend upon fraud of one kind or another to make the market go where they wish it. This class of speculators bears the same relation to the true speculator that the quack who suppresses the symptoms of the patient bears to the scientific physician who makes an honest and correct diagnosis of the difficulty to be remedied and brings the patient back to the normal condition of health. The dishonest manipulator of the market will be referred to more at length when the moral aspects of speculation are discussed.

CHAPTER II

THE EFFECT UPON PRICES

As a result of the conditions described in the last chapter, we find, gathered upon the exchanges, forces of a peculiar and interesting character. The contest that takes place may be likened to a battle; and yet perhaps popular opinion is partly right when it considers speculative trading in the similitude of a slaughter, or, as the saying is, like "shearing the wool of the lambs."

A flock of lambs or of sheep may be headed for the slaughter-house or shearing-pen. They may be in charge of a competent drover, and we may be reasonably certain that they will eventually be deprived of their wool, and perhaps of their lives. Yet these helpless creatures have wills of their own; and, by their persistently erratic conduct in following one another in every direction seemingly except the right one, may cause their keeper the greatest trouble. He will round them up finally, but in the process they may give him a very active quarter of an hour.

A person who is not a zoöphilist may enjoy such an unequal contest; and, passing to the business world, the trained economist, in his professional enthusiasm, may for the moment almost forget that business operations require the continued sacrifice of the unfit, and that implicit credulity often finds the unscrupulous ready to take advantage. Promising later to return to the humanitarian and ethical aspects, we are ready to regard the problem from the psychological and material side.

Upon the floor of the speculative exchanges, which is the theatre of the struggle at present under consideration, the amateurs or lambs are everywhere in evidence. Like the

dumb brutes after which they are named, they are unable to protect themselves; and the interest which centres in their movements is not that which comes from a fair contest. But in the process of transferring their money to the pockets of the professional speculators, important effects upon prices are observed; and it will be necessary to analyze the process in order to account for these effects.

The Minor Fluctuations

In the case of organized speculation, custom is of little importance in fixing a price, and there is an enormous number of orders coming upon the market. The arrangements are such that any item of news is at once telegraphed to the floor of the exchange, and, by a news ticker, to the various brokers' offices. The speculators are alert and anxious. Most of them are trading upon small margins, and the broker has the right to close them out if the margin be exhausted. Under the above described circumstances, could we expect any other result than that the market should be extremely nervous and jerky? No other markets except those that are the subject of organized speculation display the characteristics just mentioned.

If a person will watch the quotations as they come in upon the tape, he will frequently note the most astonishing performances. He will see wheat, for instance, selling at a dollar. A minute later, he may be informed by the quotations coming out that the value of this important cereal has changed to a price represented by 99 cents. But scarcely has the observer come to realize this fact, when he finds the quotations rapidly creeping up till $1.01 is reached.

Astonished at these movements of the market, he may go to the news ticker for explanation. There he may find any of numerous reasons assigned. It may be said, for example, that some statesman in a foreign country has advocated raising the tariff upon wheat; but that, on the resulting decline, good supporting orders were discovered at 99,

which resulted in a better feeling in the pit and hence the rise. A variety of explanations may be given; but, to the discriminating student, it would appear absurd that the value of the wheat should be really affected so strongly and so frequently by the comparatively trifling items of current news, or that its utility as an article of use was changing with each of these many minor fluctuations.

Yet the conditions are such in organized markets that every circumstance which might affect values causes the greatest amount of excitement. The news is coming in all the time over the tape. There are many traders standing about with little to do except to talk; and, of course, they will naturally fan any rumor that may start. The speculators are greedy and impatient and want their orders executed quickly. Trades must be made immediately if the order be for execution at the market; and stop orders and other resting orders described in the last chapter furnish an incalculable element which sets at naught some of the best predictions and keeps the market in a state of feverish activity.

For instance, a commodity may be selling at 90. Sentiment may be bearish, and a decline may take place to $89\frac{3}{4}$, but, at that figure, stop loss orders are uncovered, and brokers execute them, causing further uncertainties and sales, as a result of which $89\frac{1}{4}$ is reached. At that figure, we will say, there are waiting orders to buy. The crowd sees that the market is supported, and, in the buying enthusiasm that ensues, the quotations are quickly back to $89\frac{3}{4}$. But here selling orders are found, and, the sentiment turning bearish, a selling fever results with such momentum that the market is quickly down, through the buying orders at $89\frac{1}{4}$, till at, say 89, fresh stop orders are found. When these are disclosed, their execution and the resulting excitement and terror force the market to $88\frac{3}{4}$, from which point there will perhaps be another rise, and so on. The above is but an illustration of the manner in which stop orders and

other waiting orders combine with the ever-changing news and sentiment in tossing the market about in a multitude of minor fluctuations.

The fact that most of the speculators are not serious students of affairs makes their orders, whether waiting orders or for execution at the market, extremely ill-judged and eccentric. The idea exists among the rank and file that the insiders absolutely control the quotations, and that the way to speculate is to watch the indications as to what the prominent traders are doing. Thus calculations and statistics of great pith and moment are disregarded in the scramble for tips, rumors, and surface indications. Hence the traders on the floor, in the pit, and in the brokers' offices are continually watching in order to follow if possible the lucky and the powerful, and to do the opposite of what the weak and unlucky are doing. Consequently the most childish rumors are able to influence values; and such gossip, as, for instance, that an important corporation officer has been speaking to a prominent bull or bear, is widely circulated and is considered a valuable tip and a means of forecasting prices.

It is scarcely necessary to enter into argument to prove that fluctuations effected by such influences are not legitimate, for the frequent erratic price movements could not be the result of natural commercial conditions. By way of contrast, it might be well to call attention to the market fluctuations of a commodity which, owing to its destructibility, is not the subject of organized speculation. Let us consider berries, for instance. The prices of such fruit products vary greatly from day to day, and there may be important fluctuations during the day; but they are not the subject of momentary fluctuations.

Another consideration which tends to prove the fact that these momentary fluctuations are not legitimate changes in value is the curb market of the Chicago Board of Trade, which constitutes the only market after exchange hours.

There are sometimes, of course, violent fluctuations back and forth upon the curb; but all curb trading is forbidden or discouraged by the rules of the board. Hence there is little business done; and the curb trading remains comparatively stationary, slightly above or slightly below the closing price, till the next morning when the market opens, frequently showing no change from the previous day's close. Thus the curb in Chicago, being relieved of the enormous amount of trading by excited speculators, resembles those markets in which organized speculation does not exist. It is true that the curb is in a sense somewhat organized; for, with few exceptions, it is constituted of the same brokers who have been trading together during the regular session and who naturally follow the usual methods of organized speculation. But the orders given for execution on the curb are comparatively few. So in one respect, at least, it is quite different from a thoroughly organized market; and, as might be expected, we seldom find the momentary fluctuations observed during the regular session.

To sum up: organized markets are subject to a great number of momentary changes in quotations, caused by the manner in which the news is collected and distributed to the traders, and resulting in magnifying many items which are of little real importance. More than that, the great number of utterly unskilled speculators, who are always watching to see what some one else is doing, continually tend to further the erratic and choppy minor fluctuations.

Extreme Fluctuations

The prices of commodities and securities have different movements, which in a sense are independent of one another. There are the choppy fluctuations just referred to, and there are the wide swings of price movements which usually occupy a much longer space of time. The general effect of organized speculation, as explained above, is to increase the number and extent of the minor fluctuations;

but, as regards the large swings, it has the opposite effect and tends to bring the limits of such movements together. The distance between quotations is much greater where speculation is unorganized. In the case of fruits, prices may vary 500 per cent, or even 1000 per cent, between successive sales. So, too, in the case of real estate; its value is not continually changing with minor fluctuations, but there may be the widest price movements between different transactions in a particular locality. It would be no exaggeration to say that a piece of real property may sell at \$100 per front foot, while the next transaction in equally valuable property in the same locality may be at \$50 per front foot, or the difference might be even greater. It may be safely claimed that such wide discrepancies in successive quotations of articles subject to organized speculation are unknown.

The only way to make a statistical comparison between a market in which speculation is organized and one in which such organization does not prevail, is to consider the price record of a commodity both before and after organized speculation has been introduced. Such statistics, however, should be interpreted with great care. It must be remembered that speculation is not the only influence operative in recent years which has a tendency to bring price limits together. The whole modern method of doing business, with competition and organization everywhere, has an even greater tendency toward the same result. But, on the other side, there are strong reasons for believing that, while organization of itself tends to steady prices, the greater attention paid in recent years to all forms of commerce tends to increase the excitability of business men and to counteract the quieting effect of organization.

In Diagrams I and II are shown the annual range of prices of wheat and corn respectively in the Chicago market from 1865 to 1910. In Diagram III we have the extreme fluctuations of cotton each year from 1830 to 1909. In each diagram the differences between the high and low

prices for the years mentioned are represented by lines of proportionate length, so that the reader can readily com-

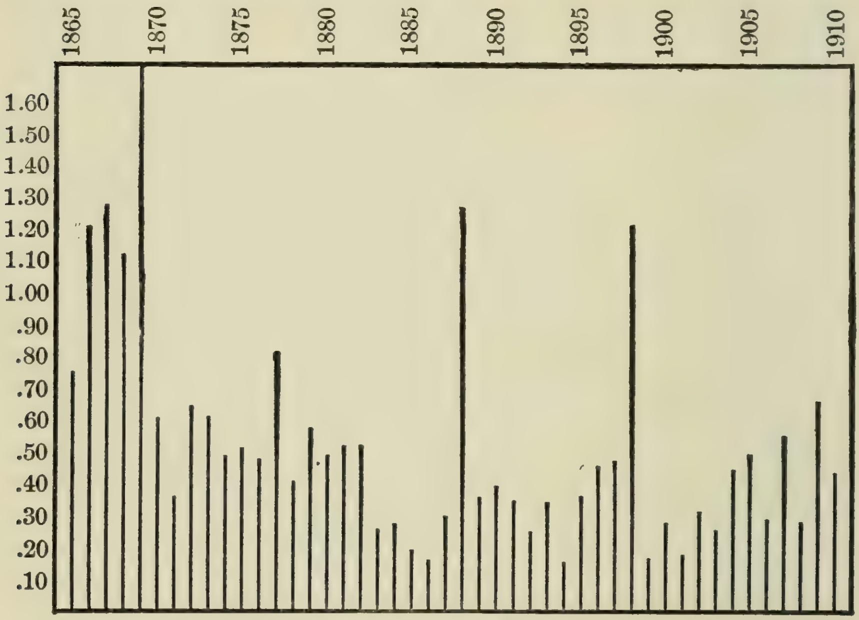

DIAGRAM I

Yearly Range of Wheat Prices at Chicago 1865–1910

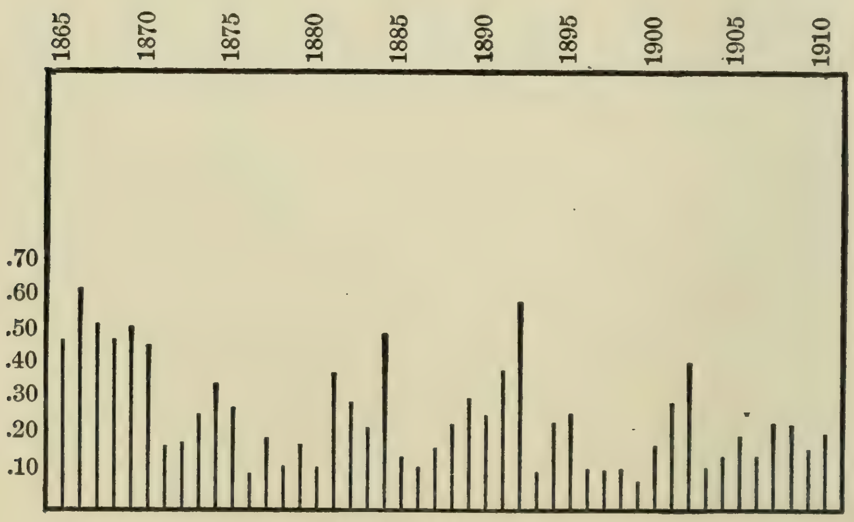

DIAGRAM II

Yearly Range of Corn Prices at Chicago 1865–1910

pare the range of fluctuations. The tables upon which they are based appear in the Appendix.

It will be noticed at the start that there is great irregu-

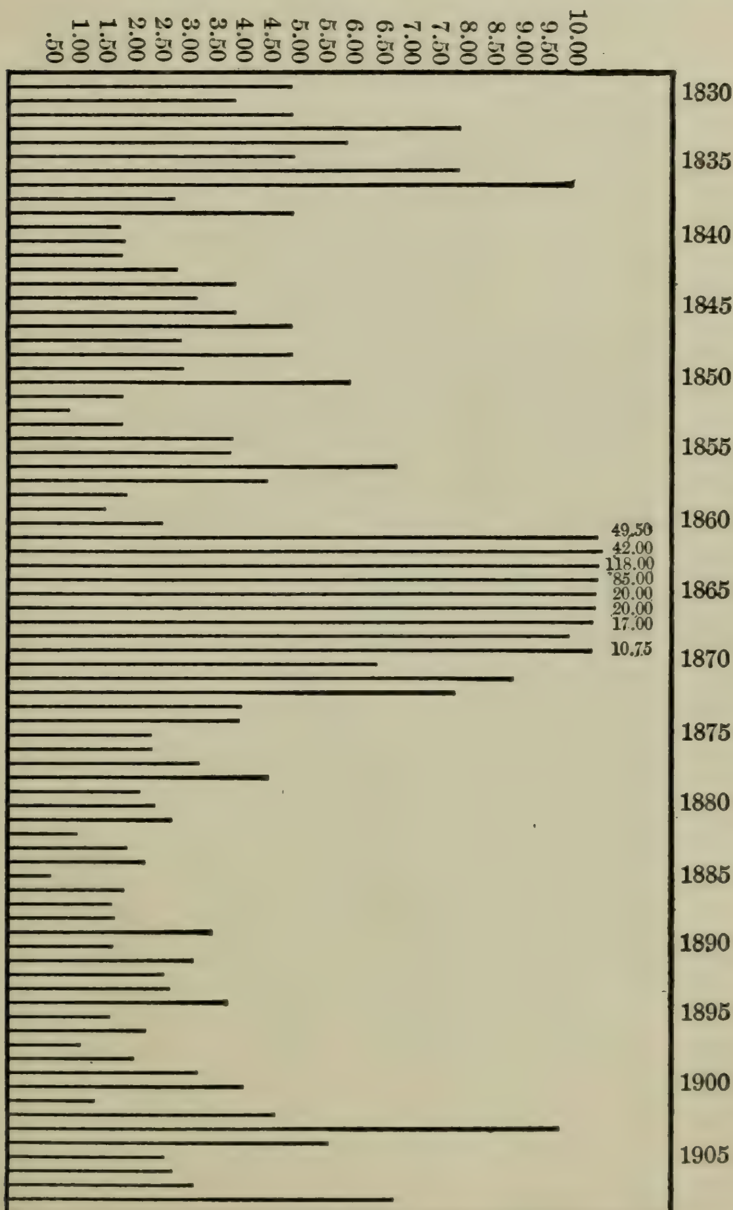

DIAGRAM III

Yearly Range of Cotton Prices at New York 1830–1909

larity in these extreme movements. To show any tendency, a number of years must be taken into consideration. The Civil War, too, widened the fluctuations of cotton, so that the range during that period should be disregarded.[1] But taking note especially of the years following 1870, which all observers agree was about the date at which the future system of trading became fully developed, a narrowing of the spread will be noticed. There have been wide ranges since that date, and, especially, in the last decade, the spread has been wide in the fluctuations of the cotton market. But since 1870, some tendency, even though it be a slight one, toward more stable markets will be noticed. It must be admitted, however, that the results shown are inconclusive, and that allowance must be made before any one should consider them of much weight upon either side of the controversy. They are introduced principally for the purpose of showing the absurdity of the statement, so frequently made, that, coming in with the introduction of the future system, we have had a great increase in the range of fluctuations. The tables and diagrams at least show that such statements are false.[2]

Statistics are uncertain in this, as in many other departments of economics, and it is rather upon *a-priori* reasoning as to what must be the effect of particular economic determinants that the greatest reliance has to be placed. Unorganized speculation and speculative business may go to almost any extreme before a halt is called to the recklessness and folly of traders. In the case of organized speculation, however, there is an important check upon the movement of prices and upon the cumulative effect of continued

[1] Among the many results on commerce of the Civil War and the methods adopted for financing it was the effect of the inconvertible paper currency which existed between 1862 and 1878. The use of this currency made prices higher for the time, and was one of the causes of the confusion and uncertainty in business transactions which resulted in the wide range referred to.

[2] *Cf.* Com'r of Corporations, *Report on Cotton Exchanges, passim.*

buying. The machinery is so arranged that the opinion of the speculator must have weight at the particular time at which he acts. In other words, he is free to act in buying or selling whenever he is ready. But the fact is not clearly shown by statistics because there are so many other determinants which enter and cause confusion.

A Market with Two Sides

In the ordinary flow of commodities from the producer to the consumer, there are, as has been shown, both long purchases and short sales. Sometimes the business man sells what he has already produced or purchased; and at other times we find him first selling what he does not own and afterwards producing or purchasing in order to make delivery. But speculation of any kind implies that the speculator does not intend to consume the particular commodity he trades in. His service to society is of a different nature, and is described elsewhere in this essay. But his trading makes a greater volume of purchases and sales, and some method must be provided for making and settling these numerous transactions. It is plain that the stocks of commodities produced for actual consumption are not sufficient for this purpose, and hence the field must be broadened by the use of paper representatives.

When a commodity is sold for cash in a modern commercial state, the transaction is usually different from a similar transaction in a primitive society. A host of writers have pointed out that this cash does not necessarily mean actual gold, and they have well shown, that in modern times the financial side of a sale may be accomplished by the use of one or more of the representatives of gold which banking and monetary science have evolved. But our economic writers have not been as careful to emphasize the fact that commodities other than gold may have paper representatives, and that a promise to deliver commodities may have just as natural a use in business as a promise to pay money.

A promissory note may be made by a party who has not the money to pay the note. It may be discounted at a bank; and when it is settled, the "payment" may not be in money at all; but the amount of the note may merely form one item of the page of a ledger at a time when numerous transactions of a similar nature are settled by book entry. The use of this paper representative of money with a short sale of gold is necessary in the routine of systematized finance. But if there is to be perfect freedom of trade, there must be equal facility in using paper representatives on the commodity side of a transaction; and hence the use which is made of promises to deliver commodities. There cannot be freedom in finance unless a business man has the right to accept the promise of another to pay money and to negotiate the same; and there cannot be freedom in commerce unless a business man is allowed to make or accept promises to deliver commodities and trade in them.

In the same sense that the bank is the highest evolution and development of the monetary system, so the exchange is the highest evolution and development of the trade in commodities and securities; and in the same way that a bank makes especial use of promises to pay money and needs special facilities in order to make the best use of these refinements of finance, so the exchange needs to be fully equipped, to have full power, and to provide special facilities for trading in promises to deliver commodities and securities. Hence it is that, though short selling is seen everywhere in commerce, it is the business of the exchanges to provide facilities for it in speculation, and to make those facilities so perfect that operations for a decline may be as easily entered into as those for an advance. When this is accomplished, we have, as a result, a market with two sides.

In order to bring out clearly the difference, let us consider first a speculative boom in a market where short selling has not been especially provided for. The speculators pile purchase on purchase, and the price of the com-

modity mounts higher and higher, it seeming, indeed, that no top will ever be reached. But this seeming is not realized; there is a limit to the folly of man, even when displayed in a speculative boom. A few of the more cautious will begin to liquidate; and, if the time be ripe for it, a selling movement will so quickly develop that it seems almost instantaneous. For a bull, when filled with terror, may be a more persistent and demoralizing seller than a bear.

As a result of the tendencies just described, we find, in the case of unorganized speculation, that the boom itself goes farther, because there is no one to check it, since the cool heads have no effective way of making their opinions felt on the market. But when at last the bulls themselves take flight, we have a condition in which prices will decline to a point even lower than that at which the boom started. By compelling all speculators to be bulls, we do not prevent declines. On the contrary, a market in which there are no facilities for the bear to act is one in which the declines are most sudden and terrible.

Turning from the unorganized markets, let us consider those in which the speculation is organized, and in which an operator, who believes that prices are mounting too high, may have weight in the market by selling for future delivery. In such a market a trader may be either a bull or a bear; that is to say, he may either buy before he sells, or he may sell before he buys. Hence the bear, when he sees reckless buying and abnormal advances in price, may apply the brake by selling. He may do this even though he have none of the property on hand; for, through the facilities provided, he may express his opinion on the market, and have that opinion made effective, without having previously qualified himself by making purchases. His selling will often bring a runaway market to a halt and give time for reflection. Its effect upon the market varies according to its amount and according to the psychological state of

ll concerned; but it will usually be sufficient to cut short the worst effects of bullish excitement. The market is thus turned downward at a much earlier point than if the more sanguine bulls were allowed to fan the flame of speculation to the greatest extent possible.

After the bears have thus demonstrated their power to affect the market, and even for a time to gain the mastery, the enthusiasm of the bulls is perceptibly cooled, and some of the more sensible of them close out their longs; others following, prices sag, and a bear market is the result.

It has been shown above how many of the excesses of a bull market are saved by the action of the bears who sell for future delivery that which they do not own. It will further be called to mind that it was the bears who first threw cold water upon the speculative bullish enthusiasm; but that, after the market had been brought to a halt and the bulls had time to come to their senses, their liquidation had helped to turn the market from bullishness to bearishness. In the same way, where there is organized speculation, the bulls are equally free to initiate a movement; and when the bear market appears to be going to excesses, they are ready to buy and so reverse conditions. Thus the pessimism that was running to excess is cut short and the market turned upward.

But bears are like bulls in their temperament and their human nature. It requires but a hint to show the more sensible of them the folly of over-staying their market. As soon as their shorts show a good profit and good buying appears, they begin covering; and their demand assists generally in bringing to a close the excesses of a bear market. In the midst of a panic, when the bulls are but just beginning to gain confidence from the few scattering purchases of the more courageous of their number, the bears may act without fear. Their purchases at such a time are but to secure their profits; and they may buy with more confidence and telling effect than the disheartened bulls,

who need great courage in order thus to enter into new commitments.

It is not intended here to convey the idea that the bull or bear party must each act together in the particular manner suggested. On the contrary, every trader is an individual, and the trades of bulls and bears dovetail into one another in the most complicated manner. In the last few paragraphs it was intended merely to discuss the probabilities as to which party is likely to have the preponderating influence at the different periods of a market movement. After a decline, when there is too much of a tendency to pessimism, the sanguine bull is necessary to pierce the clouds of gloom that obscure the sentiment of traders; but after an excited advance, when all the circumstances appear so hopeful, the cynical and careful bear needs the facility for expressing his opinion upon the market by a short sale. He needs this opportunity as much as the bull needs the privilege of making a long purchase.

As for the liquidation of the bulls, such sales help to turn a bull market into a bear market; but the change of sentiment is effected quicker if the bear has the opportunity to assist by his short sales in the selling movement. In the same way, the covering of shorts in a bear market assists a rise; but the initiative usually comes through the long purchases of the bulls.

Summing up; it may be said that in any case, whether the market be organized or unorganized, there is a limit to an advance or decline. There is always a point at which timid bulls will begin selling, even though there be no organization in the speculation. There is always a point at which demand will spring up, even though a decline may be of the demoralizing character of unorganized speculation. But in case speculation be not organized, advances and declines go to extreme limits, because bears in a one-sided market have no way of making their opinions effective, either in initiating a bear deal or in closing the same.

Organized speculation, however, permits this conservative action of the bear. It helps to cut short the boom by permitting short sales, and helps to bring to a stop the ensuing decline when the short contracts are covered. Thus it is that the balance is preserved; and the history of a bull market is the same as that of a bear market, with the parties and tendencies reversed.

The Excitability of Speculators

Such is the ideal effect of the two-sided market furnished by organized speculation. Yet there are always counteracting influences; and, in the subject under discussion, the excitability of speculators brought about by close association and organization should be mentioned.

Almost all speculators, though they ought to know the danger of their calling, are nevertheless reckless. This is true in the case of unorganized speculation as well as in that of the organized kind. It is scarcely necessary to do more than refer to recent land booms in different parts of the country to substantiate this position. Nevertheless, it must be admitted that organization, which makes it so easy to speculate, gives opportunity for the speculator to act more quickly than he could in the absence of the special facilities provided. Hence the speculative exchanges, being organized for the purpose of furthering speculation, naturally fan the speculative fever and render it possible to urge men on in masses to do reckless things that they would in some cases shrink from if acting singly.

The result is that the steadying effect of a two-sided market is to some extent neutralized. By the use of an effective system of news dissemination, market letters, and false rumors, the leaders of the market too often succeed in hypnotising their poor dupes, the amateur speculators. The insane boom of bullish enthusiasm may be counteracted by short sales; and yet the few cool heads, although possessed of millions of money, may not be able to

cut short the boom till the infatuated bulls have so committed themselves that the decline or reaction in prices will surely ruin them. And a bear market will sometimes, though not so often, run to a ruinous extreme.

A Summary

In the speculative market, as in all markets, there are cycles within cycles in which there is action and reaction in the greatest complexity; and the tendencies described are not always apparent, although each must have its effect in determining the prices that issue. At this point it may be convenient to sum up the tendencies that have been described thus far.

The great mass of amateur speculators, whose deals constitute the bulk of speculative transactions, render an exchange market extremely erratic and fluctuating. The fluctuations so caused reflect simply their inexperience and want of discretion. Like the amateurs in any line, they serve to hinder the professionals from properly doing their work.

As regards the long swings of the market, the amateurs do not have so great an effect; and the operations of the professionals, under the conditions prevailing in organized markets, have a strong tendency to narrow the range of fluctuations which the excitable nature of the speculators would otherwise further. In the early stages of a boom, the short seller cuts off what might have developed into great speculative excitement; and later, when a decline has resulted, he assists in stopping it by his purchases to cover. Thus short selling — that essential characteristic of organized speculation — has an important tendency to curtail the extremes to which excitement and over-trading would otherwise lead.

Depressing Prices

But beyond the speculative influences already mentioned, there are others which may give a market either a

bearish or bullish trend. Such a tendency may be caused by organized speculation, and may be an ever-present factor. Yet, notwithstanding the different opinions of some others, the writer takes the position that any such untoward tendency toward bullishness or bearishness in average prices, caused by speculators, is strictly limited in its field. Thus the price of wheat in this country cannot be kept at such a high figure that the surplus will not be exported at any time during the crop year. In the same way, it cannot be kept at such a low figure that farmers will not produce it. Or stocks and securities cannot be kept at such high figures that other investments will absorb all the capital offering. Nor can they be kept at such low figures that every one having funds to invest would put them all into securities listed upon the speculative exchanges. But it is possible for speculation to cause price levels, which, for a considerable period of time, are different from those which would otherwise prevail.

The limitations above stated, however, are not generally admitted; and the opinion is usual among the rank and file of speculators that the leaders of the market can put prices exactly where they wish. Among outsiders the opinion is that the movements of the market attributable to exchange trading can overcome all other price tendencies; and, particularly, that they can depress prices to an indefinite extent.

This idea comes of excellent parentage, for it is advocated by the farmer. The producer of agricultural commodities, it is argued, must be a practical man. He knows what soil and climatic conditions are needed to grow crops, and he has devoted himself so faithfully to their culture that he understands the commercial processes which ensue after the commodity leaves his hands. He knows, for instance, how difficult it is to grow wheat. Yet, upon the Board of Trade, speculators may agree to deliver agricultural commodities in the future, and contracts to deliver

are accepted in the general course of trade. It is natural, then, for the farmer to argue that it is easier to produce in this way something that will satisfy the demand for his crops than by the old process of sowing and reaping; hence he sees in the speculative seller a most dangerous competitor.

To him who believes in the specialization of functions, it would appear that the farmer knows on the average about as much in regard to the grain trade as the Chicago Board of Trade man knows about farming. But inasmuch as many persons believe in the kind of reasoning just referred to, and sweeping and drastic laws are frequently proposed, and sometimes enacted, in pursuance thereof, it will be necessary to give the arguments so arrived at detailed attention.

The Demand and Supply

It will not be questioned that the prices of commodities and securities are governed by demand and supply as interpreted and explained in the writings of the leading economists. But, in order to understand dealing upon a speculative exchange, it is necessary to have as clear an idea as possible in regard to what it is that parties are trading in when contracts are entered into for future delivery. As an instance let us consider wheat sold for July delivery. When the month of July arrives, the warehouse receipts may be delivered on the contract and the trading in it at that time is much the same as dealing in the actual commodity.

But when we are trading in July wheat before the time for delivery, it would appear that the resemblance of the future to spot wheat is not so close. If we go by the letter of the contract, no deliveries of wheat may be made until the month of July; and in the period before July 1, the thing that is in the minds of the traders, the thing that passes through the clearing-house, and, consequently, the thing that is actually dealt in, is contracts — not actual

wheat. In the subjective estimate of the value of these contracts made by the traders they naturally consider the likelihood of large or small supplies of actual wheat in the future. But the direct cause of the value which they assign to them is their estimate of the demand and supply of contracts.

For these contracts may have elements of value which are not directly dependent upon the use to which the actual wheat can be put. This is readily seen in the case of a squeeze or corner. When the rumor is heard, for example, that strong parties are getting control of the July option, the shorts naturally become apprehensive and begin to feel some doubts as to their ability to deliver the wheat when the month for delivery comes. They bid for July contracts, therefore; not necessarily because they think that wheat will be higher next July, but, it may be, because they know that a purchase of a July contract will free them from the obligation entered into by the sale of such a contract.

A trader may be of the opinion that actual wheat will be lower next July, and he may therefore feel assurance that, if he keeps his short contract good, he can cover at a profit when that month arrives; but he may be afraid that wheat will, in the interval after the time of making the deal, say March, be manipulated upward, and his margin found insufficient. Thus the July contract may have a value to him in the interval independent of the value of the actual wheat when it is delivered.

The doctrine here advanced in regard to grain contracts having a value in some respects independent of that of the actual commodity called for is no different in principle from the doctrine generally held in regard to other contracts. Let us consider a railroad bond, for instance. In its ultimate analysis such a contract is one to deliver a certain amount of gold officially stamped and certified by the Government; and an important change in the value of gold would of course have its effect upon the value of the con-

tract. If an intending investor, however, should seek information from an expert in regard to the value of a particular bond, the arguments brought forward would have little to do with the value of gold, but would be principally concerned with such questions as the loaning rate for money, the time of maturity of the bond, or the ability and honesty of the parties managing the property — questions quite aside from the value of the gold that the bond in its ultimate analysis calls for.

When the title to a bond changes hands, one party simply steps into the shoes of another, the purchaser having the rights of the previous owner in enforcing the contract. It is the same with any contract, as, for instance, one to deliver a house, a boat, or a quantity of grain or pork. If one party be substituted for another, it is really the contract with its rights and obligations that changes hands and not the thing which would be called for by its literal enforcement.

The reason why this fact is not generally recognized is probably because a bond is formally printed and signed and passed from hand to hand when sold, and is seldom settled by the payment of actual gold. But a contract to deliver wheat upon an exchange is not usually shown to its purchaser; and more frequently than in the case of a bond, it is settled by the actual delivery of the commodity called for. It is true, however, that any special value which a contract may have over and above the value of the commodity to be delivered is more frequently referable to speculation or manipulation, if the contract be to deliver wheat, than in the case of a bond; and the condition of the market brought about by the so-called artificial factors just mentioned is usually referred to as its technical position.

But whether artificial or not, technical conditions should not be ignored; and those writers, who argue that the market can be depressed by the offer for sale of wheat contracts, have a large measure of truth in their favor. In market estimates by traders, the technical position is con-

sidered highly important. In newspaper reviews, also, the nervousness of the shorts and the oversold or overbought condition of the markets are frequently referred to.

If it were not true that technical market conditions affected the prices of a commodity or security, then there could be no such thing as manipulation of the market for futures by offerings to buy or sell. The importance of demand and supply for contracts is further seen in the fact that some traders successfully scalp the market who pay no attention to the influences affecting the supply and demand of the actual commodity or security. They are traders of great quickness, who understand human nature and know the people associated with them and the conditions prevailing in the pit or on the floor.

When it is further remembered that the great unwieldy mass of contracts owned by amateur speculators are weakly held, that margins are being exhausted and contracts thrown upon the market for that reason, that a covering movement caused by apprehension of shorts is of almost daily occurrence, and that there are a great number of traders whose principal use of a contract is as a counter in the game of speculation, it is seen that a contract has a value of its own which may be greater or less than the future value of the commodity which it calls for at the time of its delivery. After making all due allowances, therefore, one of the most important things to take note of is the demand and supply of contracts, considered principally from the standpoint of their use in canceling trades in the speculative markets.

It is the mistake of the anti-optionists, that, while they can see this supply of "wind" or "paper" wheat or other commodity which is manufactured upon the board of trade, they cannot see the demand for it. Yet the demand for "paper" wheat is more important than the supply of the same, because the average speculator has a prejudice for the buying side, and is continually giving his broker

orders to bid for the futures whenever he thinks that there is any possibility of a rise in price. The prejudice of the rank and file of speculators for the bull side is so thoroughly understood, and has been so widely commented upon, that it does not need to be further emphasized.

The professional operators are smart enough to see the advantage of utilizing this prejudice; for the psychological element, so important in all price-making, is by no means neglected by the great leaders of the market. They have under their observation the supply of contracts, the "wind" wheat which is manufactured principally to speculate with, a supply which cannot be used to meet the needs of millers or exporters till delivery time arrives. But against the supply, they note an even greater demand for this same "paper" wheat from traders who wish it purely for speculative purposes. What, then, is the result? The demand for "wind" wheat is greater than the supply of the same; and it is readily seen why it is that the market for futures always has a tendency to rise, even on the slightest provocation, and why manipulators so often are found taking advantage of this tendency by working the market upwards.

The Temper of the Speculators

Since the demand and supply of contracts are so important in determining price, we are led to consider the state of mind of the traders in contracts, and the peculiar nature of the contract itself as affecting their psychological condition. The important points to be thus considered are that the majority of traders are naturally bullish, and that the terms of a short contract are such that the bears are always apprehensive lest they be driven into some kind of a squeeze or corner.

The market manipulator must manage his crowd of reckless, rash, eccentric traders by conforming to their prejudices and taking advantage of their weaknesses. He

must conform to their prejudices by being especially sure of his ground if he opposes them. The time when they become dangerous is when they stampede; for at that time, like a herd of frightened cattle, they lose all reason, and, closing their eyes, rush on, destroying not only themselves but their keeper.

To one who is familiar with the psychological nature of the average speculator, it will be apparent that anything like bearish operations must be tabooed till prices have first been forced to an unnaturally high level. For the manipulator to force prices below the real value of the commodity is dangerous in the extreme. But he is not always sure as to whether prices are above or below their natural level; and there are a host of semi-professional dealers and a considerable number of amateurs who are bears and who sell short. Furthermore, these bears know the danger of the contract that they have entered into. While many of them are quite uninformed about the actual commodity and have no facilities for getting it when the time for delivery arrives, they know that, for them at least, the only practicable way in which they can cover their short is by buying a long contract. They know how the price may be manipulated, and how they may find themselves at any time under the powerful necessity of bidding for the commodity amid a host of stampeded shorts, and they are fully aware of the usual effect of such a contest. It is because these things are so well in mind that such frequent reference is made in market reviews to the fact that prices have risen, or may rise, as a result of the covering of shorts.

There are others beside the amateur speculators and the frightened shorts who assist the market manipulators in putting up prices. It is to the interest of the commission man that the market be advancing; for he knows that in bull markets there is more trading; and, when trading is large, there are many commissions. Hence the broker will frequently send out bullish circulars hoping to get his clients

to buy; and he stands ready to aid in any way in working up a buying fever of excitement.

When a commodity is selling upon the basis of its demand and supply and regularly passing into consumption, the market manipulators can buy it with comparative safety. They have a chance, which is much more than an even one, that the next movement of the market will be upward. Having loaded up with a good line and the bull ? campaign having opened, the manipulators take advantage of the assisting influences above described. They nurse a short interest; then they proceed to stampede the shorts into buying and spread terror among them by giving out rumors of possible corners and squeezes. They manipulate the news, give out bullish interviews; and, assisted as they are by the prejudices of the amateur speculators, by the covering of shorts, and by the self-interest of the broker in seeking commissions, generally do succeed in working up a bullish excitement.

This matter of fighting the bears is always important in organized markets. The bear, by his contract, has agreed to deliver something that he does not own. Whether or not he can purchase that something at the proper place and within the prescribed time, is a question; and, by the very conditions of an organized market, there are many others who have entered into similar contracts. The supply either of a security or of a speculative commodity is for most practical purposes limited. The stock of corporations cannot be increased except in conformity with fixed legal provisions. In the same way the supply of speculative agricultural commodities cannot be increased till the next crop is harvested; and all crops are subject to numerous vicissitudes. Hence the bear who knows his business is most cautious and runs at the slightest scare.

After an advance has been engineered, the manipulator must know when to stop. If the price of wheat, for instance, were put to the very highest figure to which it could

be forced, consumption would be reduced, production would be increased, and an enormous supply would pile up, which could not fail to cut short the advance. Even before that event occurred, the short selling would begin to turn the market. Knowing that others will make such sales, the professionals who have manipulated the advance anticipate future events by closing their long lines and going short in the midst of the bullish enthusiasm and excitement, which, to the superficial observer, appears to have such force that it will never stop, but which, to the far-seeing speculator, will soon usher in a decline. The market then sags off as a result of the influences above mentioned.

Hence a market upon the speculative exchanges will be one in which the price moves upward from a basis where the commodity will pass into consumption, but in which it afterwards sags back to that basis. Upon the Chicago Board of Trade it is a tradition that the wheat must be low enough during the crop-moving season so that contracts may be made for a reasonable amount of it to be exported; but for many months of the year the market will be above an export basis. Indeed, it could not get much below such a basis, as there are so many artificial influences ready at any time to send it up on the slightest excuse. The same principles which govern wheat control also cotton and other speculative commodities, the course of a market being in the same way from a consumption or export basis upward and then back to such a basis, but little below it at any time.

The above discussion applies to the contract grades. The other grades sympathize with the movement in the prices of futures and of the grades on which futures are based; but they do not always have the important upward rushes in price that are such a familiar feature of the future market. Hence the non-speculative grades have, to a considerable extent, the advantages of organized speculation without its disadvantages. By reason of the fact that they

sympathize with the movement of the speculative grades, the steadying effect of short selling and a two-sided market is communicated to them. And, inasmuch as they are not themselves speculative favorites, they are not subject to the frequent ups and downs with momentary fluctuations which are characteristic of the future markets. Furthermore, even at times when the contract grades are so high in price that exports are shut off, the non-contract grades may go out of the country or pass into consumption.

The relative prices of contract and non-contract grades should throw much light on the question of the effect of organized speculation. When a grade is made deliverable on contracts, it has a tendency to make a demand for it for speculative purposes and to raise its price. But the continuous shifting of numerous commercial factors, all of which have their effect upon prices, renders it impossible to show such a tendency by a table of price movements. The following account of the experience of the Chicago Board of Trade in making different grades deliverable indicates the sustaining influence of speculation on prices: —

"Up to 1891 we accepted No. 2 wheat, no matter of what variety. The wheat then produced in Iowa, Nebraska, and other sections tributary to this market, was a variety incapable, by reason of its inherent qualities, of being manufactured into a high grade of flour. It was so inferior to No. 2 Red, No. 1 and No. 2 Northern Spring, that the millers bought these latter grades and let the No. 2 Spring, the grade above referred to, alone. It accumulated here to the extent of several millions of bushels. When the late William T. Baker was elected president of the Board in 1891, he, in his inaugural address, advocated the amendment of our rules so that they should provide only for the delivery of No. 2 Red and No. 1 Northern Spring. The rules were so amended by vote of the association. The effect of this was to completely stop the production of inferior wheat. So long as it was deliverable on contracts for future delivery,

it of course had a good market. It sold then on that basis. The other grades always, that is, the No. 2 Red and No. 1 Spring, always sold at a premium over it, but when this delivery privilege was taken away from it, farmers stopped raising it.

"Again the No. 2 Hard Winter Turkish wheat, mainly produced in the tablelands of western Nebraska and western Kansas, northern Oklahoma and the Pan Handle of Texas, for many years was not deliverable on contracts for future sales. After a few years from the time its production in the United States was begun, it was made deliverable at 5 cents discount, later this was made 3 cents per bushel discount, and then this penalty was removed and it was made equal with the other grades. Its production thereby was increased, and now it is not only produced as largely as ever in the territory named, but also in Missouri and Illinois. . . .

"I suppose that it may be truthfully said that this is a question of making a market and of destroying a market, and that such result might have been reached through ordinary merchandising channels of the millers, yet, so soon as the delivery on future contracts was affected, the production of the grain was materially affected. May we not say, then, that if it could stop the production in the one case, and increase it in the other to a very perceptible degree, that it has a pronounced influence on values? That it upholds and adds to the value of that which is desirable, that it bears down and obliterates that which is undesirable?" [1]

To the writer it seems highly significant that the stock of a grade should accumulate while it is good delivery on contracts and that the production of a grade should be largely increased after it is made deliverable. The effect of organized speculation is to make a demand for commodities. It would not be possible to float a number of con-

[1] From a memorandum furnished by Mr. John C. F. Merrill, formerly President, now Secretary of the Chicago Board of Trade.

tracts in all of which the seller legally obligates himself to deliver commodities without making some net demand.

As regards stocks the same tendencies are to be noted. There is the same bullish prejudice among the rank and file of speculators, and there is the same well-founded feeling of apprehension on the part of the shorts, and the same class of professional speculators ready to take advantage of these facts. The value of a stock, considered as an investment, is determined by the nature of the security, its class and conditions of issue, and, especially, the earning power of the property which it represents both present and prospective. There are so many conditions entering into the problem that one can hardly present any tables or statistics which will prove the point. For instance, tables might be presented showing that the stocks listed upon the New York Stock Exchange sell at an exceedingly high price when we take into consideration the dividends that they pay. But such a table would be inconclusive from the fact that there are advantages of holding the title to property in the form of stocks other than that of having them listed upon the stock exchange. Thus property may be more easily handled and divided, and enterprises may be more easily financed, in that form. Still it is significant, as far as the argument may go, that listed stocks sell at high prices when their earning power is considered.

Perhaps the best indication that organized speculation has a tendency toward giving stocks a higher value is the attitude of those who have them to sell. The promoters and organizers of great companies are the manufacturers of stocks in the same way that the farmers are the producers of agricultural products, and upon the stock exchange we have the same general characteristics of dealing as upon the board of trade. Stocks may be either bought for long account or sold for short account with the greatest facility and can be held for either account for considerable periods of time. Yet the promoters and others interested

in marketing stocks are anxious to get them listed upon the exchange, even though the conditions may be onerous; for they know that there is the place where undigested securities are best made digestible. The reason why these manufacturers of securities take such a different view from that of producers of agricultural products, is because these promoters are usually familiar with the ways of organized speculation and know the tendency of a market so governed; while the farmer, as a usual thing, knows little of speculative markets.

Corners

The nervousness of the bear, and the dangerous nature of the contract that he has entered into, have been referred to; and he is not apprehensive without cause. The purchaser of a commodity may have a light margin; but he at least knows that there is a limit beyond which the price cannot decline. The short seller, on the contrary, knows no limit to a possible advance in price. The purchaser of wheat at $1 knows that at least $1 per bushel will be the extreme limit of margin calls. But the short seller, on the contrary, has no such assurance. The commodity may go to $2 per bushel, and even then he will be in doubt as to whether the top is reached.

The corners which have occurred are a perpetual object lesson in the mind's eye of the bear, warning him of the danger of his position. Such price movements may take place entirely independent of the value of a stock for an investment or of a commodity for use. They furnish the explanation of the advice celebrated for its wisdom, but notorious for its bad grammar, which is said to have been given by Daniel Drew, namely, — "Young man, don't you never sell nothing that you don't own."

In the year 1897 the agriculturalist in this country was perhaps more discouraged than at any other time before or since; and it seemed as if there was no demand for anything

that the farmer or planter produced. The price of wheat, for instance, had fallen, and all looked to it as an index of values for agricultural products. The farmer, it appeared, was destined to grow his crop, bring it to market, and get for it the most absurdly low price. Every product of the farm was at the lowest ebb. Cotton, cereals, butter, eggs, vegetables — all were low in price. But in the summer of the year mentioned, there were noticeable some signs of improvement. A mysterious upward movement began in wheat alone of all commodities; and the news soon came upon the tape that Joseph Leiter was attempting a corner. Amidst the sneers and gibes of those who believed that the farmer must always suffer in silence, and while agricultural products that were not the subject of organized speculation still remained low, the wheat market was manipulated upward until $1.85 was reached. The high point in the price movement of the cereal was soon passed, as corners are but temporary, and only wheat deliverable on futures rose to the price mentioned. But this startling example, occurring at that particular time, was enough to give an indication, even to the most careless observer, as to who it is that is ever ready with any excuse to raise prices.

The writer makes no defense of corners considered from either a moral or commercial standpoint; but he confesses that he fails to follow the arguments of those who hold that organized speculation puts prices down. If, as has been said, the speculators have only to sell any quantity of "wind" or "phantom" wheat in order to cause a decline, why did they not do it on this particular occasion? The facts are that the price went up because so much wheat had been sold and the shorts were so anxious to cover. Even upon the board of trade, speculators cannot be found foolish enough to sell indefinite quantities of short wheat, nor would they have money enough adequately to margin the enormous quantities frequently supposed.

Or, again, if the reader had been watching the quota-

tions as they came over the ticker at the time of the Hutchinson corner in 1888, when the manipulated future went to $2 per bushel, the other futures following much behind, how could he help but be impressed with the idea that organized speculation is more important as a cause of advances in price than of declines?

The Commodity in Store

The warehouse receipts which are deliverable in settlement of contracts are merely the representatives of so much of the commodity, and the law is strict which prohibits the forging of these receipts or their issue in excess of the amount in store. But, referring to the futures of wheat, this "wind," as it is sometimes called, may be created in any amount, provided there be parties who are willing to run the risk of so creating it and who put up security. All that is necessary to bring into existence a lot of 5000 bushels, or any number of bushels, is for a seller and a buyer to agree on a price for the wheat to be delivered in a future month; and if proper margins are deposited, this contract, this "wind" — whatever it may be called — enters upon the market and constitutes a part of the supply of contracts. On the other hand, it must be admitted that an indefinite number of legal obligations are not likely to be entered into without any provision for ever fulfilling those obligations. While it is freely conceded that "wind" wheat can be created to any amount, subject to the conditions just mentioned, yet sane business men will not enter into large contracts for the delivery of the commodity unless there is a supply of it in the elevators, or in the country contiguous in such a position that it can, if the need should arise, be placed in the elevators in time for delivery. And the tendency always is to pile up the reserve in the delivery city, in order to give a feeling of security to the bears who may be called upon for a literal fulfillment of their contracts.

In order, then, to have a broad speculation in wheat with extensive short selling, we must have a large reserve; and in order to furnish this reserve, a great demand is made on the farmers to bring forward the wheat, thus tending to advance the price of the cash article. It is common, in farmers' institutes and in publications that are devoted to the supposed interests of the farmer, to advocate the segregation and holding of agricultural products in order to keep up the price. We have the celebrated "Hold your Wheat" circular of some years ago as an example; and numerous combinations of the sort have been organized for holding wheat, cotton, and other agricultural productions. Governments, too, in different countries have undertaken to hold coffee, raisins, and other commodities for the purpose of advancing the price.

If it be thought desirable to raise the price of a commodity by holding a large quantity of it from pressing on the market, the method described above, which is now in operation upon the speculative exchanges, is by far the most effective. The volume of speculation is so large that even the few deliveries which take place, though they are but a small percentage of the amount represented by the contracts traded in, are yet of considerable size in the absolute.

The advantage of this method can perhaps best be appreciated by comparing it to methods that are similar, with the exception that the buyers are other than the speculators to be found upon the exchanges. The most successful of these schemes is the so-called valorization plan for raising the price of coffee.

The State of São Paulo in Brazil, finding that the coffee planters were oppressed with very low prices owing to the large crop of the season 1906–07, undertook the experiment of buying coffee and holding a part of the purchases from the market, with a view to enhancing the price. This it was able to do through loans made by international syndicates.

As for the success of the scheme, it must be admitted that there has been a great rise in the price of coffee during the five years that the plan has been in operation, and part at least of this advance should be attributed to valorization. Nevertheless, there is little reason for considering it the controlling factor. It would carry this essay too far afield if an attempt were made to discuss all the influences which have affected the price of coffee during the last few years. It should, however, be called to mind that the crop of coffee in 1910–11 was little over half of that of 1906–07, and intervening crops have also been small; hence there is as good reason for saying that the crop situation enabled the valorization scheme to keep on its feet as there is for saying that valorization controlled and overcame the crop situation. Furthermore, the well-known fact that nearly all commodities have advanced in price in recent years (some of them more than coffee) should throw further light upon the matter. Thus there is slight justification for declaring that the rise in the price of coffee is necessarily to be attributed to valorization.

The best way in which the two methods of enhancing prices can be compared is by considering the economic strength of the respective forces that are behind them. In the case of a scheme such as that for valorization, in which the Government or a syndicate buys a quantity of the commodity for the express purpose of raising the price, we have a demand which has been created for purely manipulative purposes; and the buyers in such case are naturally timid. Such an agreement also is likely to be tainted with illegality, as witness the attack of the United States Government upon the valorization scheme. In the case of a syndicate, there is danger that one member of the syndicate or combination will sell out on the others. If the commodity be pooled in such a way that no member may sell his share, it is still possible to sell the commodity short. And even in a case in which a sovereign state is behind such a venture,

there is doubt as to whether it could overcome the laws of trade.

In contrast we have the action of the speculative exchanges, in which the demand is backed by certain powerful moving forces in human nature, so strong that there is a perpetual stream of speculators entering the market to bear the load. And usually the new traders coming in are more than able to take the place of those who drop out. The speculators, also, be it noted, have not been over-persuaded to undertake to carry the commodity, but have undertaken it voluntarily, through the hope of personal gain; and, however delusive their hopes may be, the human passion that moves them is one of the strongest.[1]

The writer is well aware that a large supply of the commodity piled up in the elevators and warehouses is a bear argument. The traders make a mental estimate of the amount that, in their opinion, should constitute the proper stock in a particular position; and, if the actual stock appears large, they have a tendency to become bearish and sell the commodity. The gauging of the proper price by the relative size of the stock on hand is one of the very best methods of legitimately determining values. But the considerations just mentioned by no means negative the idea that a large average stock is rendered necessary by the fact that there are so many short contracts afloat, and that the bear must have some of the commodity in sight in order to give him even such little legitimate ground as he has for his confidence and his recklessness.

Furthermore, when it is said that the tendency of organized speculation is toward large stocks of the commodities traded in, it is not denied that there are other tendencies which may at times exercise the controlling influence.

[1] As regards the value of securities the well-known failures of governments to bolster up the value of inconvertible paper money and other obligations need scarcely be called to mind. *Cf.* Conant, *The Principles of Money and Banking*, book VI, chap. IV.

Modern means of communication and methods of handling business have been so perfected that it is possible to pursue what is called the policy of buying from hand to mouth. Hence an importing nation, such as Great Britain, may, under present conditions, carry a smaller stock than would have been thought necessary in former times. Indeed, the English often complain that their stocks are too small under modern trade conditions, especially in view of possible wars. However, the facts just referred to by no means prove that speculation is not the cause of larger world's stocks, other conditions remaining the same. What they do show is merely that an importing nation is forcing the exporting nations to carry stocks in accordance with a general tendency observable on every hand. Taking the wheat market as an example, it is readily seen that the large quantities of the cereal held in the speculative centres ready to deliver on contracts, and the habit of the speculators in building up such large stocks before they will commit themselves extensively on the bear side, constitute a demand for it; thus enabling this country, for instance, to carry the stock with little pressure upon the producers, as it is the speculator who pays the bill.

At short range the speculative contest resolves itself into a fencing match which centres around the question of whether these supplies are large enough to meet the needs of the bears. There is always wheat enough for actual use in the countries of modern development. Any unseemly scramble among millers to buy wheat or among consumers to buy flour causes only a mild disturbance. But upon the board of trade it is apparent that the price fixed is often above that at which the commodity would actually pass into consumption. Bears are always trying their luck to see if they cannot sell short and so reap a profit by a decline to the natural price, but their attempts to do this are continually thwarted by squeezes, and, more rarely, by real corners. So the price is forced up and kept high for consid-

erable periods of time by the repeated demands of the shorts for the commodity to fill their contracts.

The old supply is usually withdrawn each year; but a part of it is continuous, as a certain amount of the new crop is put back into the stock. From this fact some might draw the conclusion that, as one crop replaces another, there is no new demand for speculative purposes from year to year. But this supply, which is necessary in order that there may be any speculation, tends to grow larger and larger each year, notwithstanding other general tendencies in an opposite direction, and notwithstanding the repeated fluctuations in the stock. Besides, there is a loss in weight and other elements of value, even in keeping a commodity which can be as easily preserved as wheat; so that the warehousing of large supplies causes consumption in that measure.

The Street Supply of Stocks

In the above discussion and throughout this essay, the wheat market has been frequently used as an illustration. Yet the conclusions arrived at are applicable to corn, pork, cotton, and several other agricultural commodities, and also to securities which are speculated in upon the exchanges. The demand for commodities for speculative purposes contributed, while this country was growing and before manufacturing was well developed, to counteract other commercial tendencies; thus making a special demand for agricultural products, which at that time were particularly profitable, and when they were, in a more important sense than at present, our natural products.

The market for stocks also was greatly helped at the time by the speculative demand. In the development of this country which took place during the nineteenth century, the extraordinarily expensive operation was undertaken of transforming the transportation facilities from a system which required little capital to one in which a great

outlay was necessary. The railroads when first built seldom paid any net income. They were considered foolhardy enterprises at the time, because they sought to accomplish an object by untried means. They *were* foolhardy enterprises from a cold-blooded investment standpoint, because no one, not even the wisest, could tell, till after years of trial, whether that particular method of transportation was really practicable, and because at the time there were not proper arrangements for conducting such corporations and systematizing them. The costly experiment of undertaking these things was paid for by speculators.

In the history of most of our great transportation enterprises some broad-minded and imaginative man has usually figured as the original moving force. He, in his enterprising spirit, has planned the road; he has put in some of his own capital, perhaps, and has induced conservative capitalists to take bonds. But as these great enterprises at the start are so hazardous, he could not find a sufficient number of broad-minded and imaginative men who were willing to run the risk of taking all of the common stock. The manner in which this stock was actually placed was for the promoters to go into the stock exchange and, by wash sales and otherwise, to induce speculation, and so create a purely speculative demand.

There were not at that time large masses of capital seeking investment, and investors were cautious. But Wall Street was just developing; it must have something to speculate with, and it took the stocks of the new enterprises which others refused. The new securities became speculative favorites, and they constituted a large part of the street supply of stocks which circulated from hand to hand on the exchange in making deliveries. If these stocks had not been sold to Wall Street speculators at first, there would have been great delay in financing such undertakings, and our railroad system would have been many years behind its present development. For, let it be remembered,

that, even in the enterprises which afterwards turned out to be good income producers, the investor usually lost what was first put in.

It is not attempted here to justify practices which have made some of the worst pages of our financial history. It is merely pointed out that the first stage in the digestion of common stock has been its sale to adventuring speculators. Later, when an enterprise has passed through different receiverships and several reorganizations, when there has grown to be a demand for what it furnishes, when the management of the corporation has improved and dividends have become regular; then the stock passes to the last stages of digestion, and, leaving the hands of speculators, is taken up by careful investors and business men. But it is speculators who supply the place of men of imagination and insight in first absorbing the stock, and it is also the speculators who try it out, and subject it to such buffetings upon the exchanges that the management is forced to improve and so give the stock a good value.

Different Nations and Classes

The effect of the frequent upturns in prices caused by speculation upon the exchanges is beneficial, as has been shown, to the people of this country, for our exports consist largely of agricultural products, the most important of which are speculated in upon the exchanges; and the stocks and securities used to finance our productive enterprises are also the subject of organized speculation. But not all classes of the people experience the benefit to an equal degree; and some of them, pending adjustments of prices to ever-changing conditions, are no doubt injured. The injury is not so great, however, as is ordinarily supposed, for the number of those who get their living directly from the soil is large; and, when agriculture is prosperous, our manufacturers and other producers find their profits increased.

If there be any classes that are not benefited by specu-

lative booms in agricultural products, they are such as depend upon fixed incomes from investments or upon salaries, fees, or wages. Considering first those who live upon the interest of money lent or from the income of stocks, bonds, or other securities, it should be noted that they are always anxious that agriculture be prosperous. To explain the reason, we might call to mind such years as 1894, 1895, or 1896. The price of food and other agricultural products was low in those years; and, as a result, the conditions that prevailed in our basic industry made the income precarious on investments which would otherwise have been profitable.

Taking the legal profession as an example of the fee-receiving classes, it might be noted that while there is much litigation even in bad times, yet, if others are prosperous, the lawyer can better collect his fees. Or, considering those who live upon salaries or wages, it may be admitted that wages have not risen as much as the cost of living; yet the reply frequently made must be considered, namely, that when business is active, there are fewer workers out of employment and there are a greater number of salaried positions.

As regards different countries it may be noted that some of them have interests quite at variance with ours. Let us take England as an example. In that country manufacturing is more important than agriculture; and it is desirable from a British standpoint that manufactured articles be high in price. To the Englishman the speculative booms and corners in agricultural products, which are features of trading upon the exchanges, are not welcome. It is natural, therefore, that the English should look with dislike upon such speculators as Leiter and Hutchinson, and that Mr. Patten should have been mobbed upon the floor of the Manchester Cotton Exchange.

As regards the question of the rate of profit and of interest, the conditions in England are quite different from ours.

The English have a surplus of capital which they are continually investing in other countries. Desiring, then, as they do, a high investment yield, they naturally seek low prices for bonds, stocks, and securities; and nothing can exceed the disgust of the English financial writers and authorities when they discuss the great speculative booms so often seen upon the New York Stock Exchange.

There are very few countries whose interests are similar to England's in this respect; and most nations are benefited by speculative booms, whether they occur in the raw materials usually speculated in upon the commodity exchanges or in the securities used in advancing productive enterprises. Nevertheless, it must be admitted that the organization of speculation does not affect all nations in precisely the same way; and that, despite the economic compensations and adjustments, all classes of the people are not equally benefited.

Cotton Exchanges

In order that speculation may be fully organized, it is necessary that the article traded in be representative — that is to say, it must be capable of being designated in a uniform manner. Furthermore, it is highly advantageous in the interest of fairness that the sources from which the commodities or securities may be got, should, so far as possible, be matters of common knowledge, and that the field from which they may be procured should be a wide one.

More than one well-known corner in Erie is brought to mind in this connection. In the case of the corner in that stock which occurred in 1866, the speculator whom some were attempting to squeeze was also treasurer of the company, and he had lent money to the Erie on the security of certain of its bonds which were convertible into stock. But this latter fact was not generally known on the street. Accordingly, after inducing the bulls to make extensive purchases, the holder of the bonds converted them into

stock and made delivery on his sales, thus causing a terrible break with great losses to those who were caught long. Such practices are usually considered more as tricks than as legitimate commercial transactions; and, in recent years, traders have looked carefully in carrying on operations to any possibility of converting bonds into stock in the manner described.

The difficulty of providing adequate rules which will control the deliveries is not great, however, in the case of stock exchanges, since securities are homogeneous and readily divisible; and it is only by some slip of the law, as in the illustration just referred to, that there can be any uncertainty. Yet there are many cases where the dealers in commodities would like the help of organized speculation in carrying them; but they cannot get this owing to the fact that there is not enough of the commodity of a particular grade to make the necessary deliveries and to avoid the danger of frequent corners. To remedy this difficulty it has been provided in some exchanges that, if the seller wishes, he may deliver a better grade than the one on which the contract is based, or he may deliver an inferior grade with a penalty which is supposed to cover the difference between its value and that of the higher grade, thus widening the field of possible deliveries.

Upon cotton exchanges this question of varying grades has caused much trouble. Widely extended rains, for instance, at a critical period in the season may lower the grade of a large part of the crop. Hence, in different years, the amount of a grade which can pass into consumption and be delivered on contracts will greatly vary; and it is particularly necessary to provide for substitution of grades in making deliveries. There is nothing in the least reprehensible *per se* in providing for this necessary substitution; for it is plain that, if only one grade be deliverable on contracts, the liability to corners is greater than if several grades are so deliverable.

In order thus to widen the field of possible deliveries, an ingenious system has been provided by means of which the price of a future may be based upon a particular grade; but other grades may be substituted in making deliveries, with an allowance which is intended to make the substitution equitable. At the New Orleans Cotton Exchange the basis is middling cotton; but other grades may be delivered on contracts at certain differences, which are changed by a committee to conform to the daily fluctuations of the different grades in the spot market. The New York Cotton Exchange employs a similar system, except that the differences are not revised as often as at New Orleans.

The length of time that elapses between the different revisions is of the greatest importance, however, and the New York Cotton Exchange has been criticized because its revisions are not more frequent.[1] It is argued that conditions may change after the differences between the grades have been fixed, so that a grade may be over-valued, or the reverse. The result of such a false valuation might be that a considerable margin of difference would arise between the spot price of middling cotton and the price for contracts. Hence, it is reasoned that by an economic process somewhat similar to Gresham's Law, the over-valued grades establish the price at which the contracts are sold; and, between the revisions, a system analogous to the alternative process of bimetalism results. Consequently, the price of the future, which ostensibly represents the price of the grade on which it is based, may be at a discount from the price of such grade.

The charge has therefore been made that this method of adjusting differences tends to depress prices. The reason assigned is that the system of handling cotton is based upon the prices for futures; and dealers at outside points, in making bids to producers for their cotton, do not in all

[1] *Cf.* Commissioner of Corporations, *Report on Cotton Exchanges, passim.*

cases understand why it is that futures are depressed. Therefore considerable time may elapse, and much cotton change hands at inequitable prices, before the proper ratio is again established.

The officers and members of the New York Cotton Exchange, however, do not take the pessimistic view of their system just stated; and while it is admitted that there should be revision of differences, it is nevertheless held that the contracts should be calculable ones, and that a great frequency of revision makes an unnecessary uncertainty in regard to what a purchaser is to get when the cotton is delivered to him. Still, in order to avail itself if possible of the best that is in the different systems, the New York Cotton Exchange has amended its by-laws so that the revision committee will revise the differences three times instead of twice a year as formerly; and there is a disposition to await the result of the enforcement of the new rules.

In the meantime it should be remembered that the special difficulties to be overcome in a particular case, while they may cause modification of rules of action, should not be the ground for sweeping changes. The cotton exchanges are obliged to meet a difficult situation, such as does not exist in other exchanges; and it will require further time before all parties are agreed as to the best method of adjusting the controverted matters. The abuses which may grow up in a particular line of trade should not be confounded with the principles of organized speculation itself.

Summary of the Upward Tendencies

As a result of the conditions described, commodities that are the subject of organized speculation can be kept, and usually are kept, above their export or consumption value a part of the time each year. It is admitted that contracts entered into to deliver in the future constitute the supply of such contracts, and it is further admitted that contracts

to deliver enormous quantities are so entered into upon the exchanges. But after conceding the above, the attention of the reader was called to the fact that speculators are naturally bullish, and that the demand made by them for contracts is far greater than the supply that they bring into existence. And, inasmuch as the prices of the actual commodity sympathize with the prices of contracts, the principal reason why organized speculation has a strong tendency to put up prices is made apparent. Any manipulation, too, would naturally be so conducted as to take advantage of this prejudice of speculators for the buying side, since it is easier for the market leaders to utilize prejudices which already exist than to create new ones.

This enormous net demand made by buyers upon the speculative markets is increased by the fact that sellers must make some deliveries, and that the numerous corners and squeezes and fears of the same cause the shorts to make purchases of the actual commodity and place it in store where it may be used for delivery, and that a certain amount is thus held from augmenting the supply of the actual commodity for consumption. Furthermore, the short contract is one which makes a trader who enters into it exceedingly nervous and apprehensive, and the shorts are always taking alarm and bidding up prices. These frequent alarms with covering of shorts cause most of the numerous sharp rises upon the exchanges; and occasionally, the bullish manipulation becomes so rampant that the shorts are forced to cover at considerable loss in a squeeze or corner.

It is also to the interest of brokers that prices be moving upward, as advancing markets mean large trading and speculation with numerous commissions; and their circulars, personal solicitation, and advice help to increase the speculative excitement and advances in price. Any tendency to artificial prices should be deprecated; nevertheless, it may be noted that speculation in agricultural products has

served to make a demand for the same and has given higher prices for commodities which could be produced to advantage in this country. Furthermore, the stock exchanges have helped greatly in financing the construction of our railroads and other industrial enterprises, as they have not only reduced the cost of marketing, but have also enabled promoters to place the stocks at good prices upon the exchange.

The Complication of Prices — A General View

As stated when the discussion of the price tendencies engendered by organized speculation was begun, there are three such tendencies which are more important than others and these have consequently been selected for particular description and comment. These tendencies, however, shade into one another so imperceptibly that it is difficult to summarize or define them. Though one or another of the numerous factors may assume such importance as to be called, for the time, the predominating one, yet the situation is continually shifting in such a way as to render it impossible to make any accurate description by the easy method of using set rules and sweeping statements. The only method possible is the one here followed — to describe the action of the principal factors separately, remembering that the combinations that present themselves are infinite in their number and variety.

Perhaps the complexity of price-making may best be illustrated by a comparison to the ocean and the law and lack of law which govern its movements. The ocean has its currents, which follow their course notwithstanding the disturbing influences which always assert themselves. Any given portion, as a cubic yard, is acted upon by different forces at the same time. The cubic yard, taken as an illustration, may form part of the water in a great current which can be charted and will always follow its regular course; but this portion of the water, while moving in the current can be affected by forces which are irregular in their

action, such as those causing the waves and minor movements. Furthermore, there are tides which elevate a part of the mass of the ocean and then allow it to fall back to the general level.

There are many movements other than the three just mentioned observable in large bodies of water, and we can scarcely conceive of the complexity of the results of the various forces involved. But the factors to be observed upon a speculative exchange are fully as numerous and complicated as those to be seen in the ever-changing ocean. In the same way that a particular quantity of water in the ocean is acted upon by different forces at the same time, so it is with prices in the economic field. They are the result of many forces simultaneously acting in quite different directions.

The currents of the ocean which serve to adjust its mass to important underlying conditions may be compared to the movements of prices described above, in which, by the action of organized speculation, the wide variations in value seen outside the exchanges are avoided.

The waves upon the surface of the ocean can be compared to the numerous minor movements of prices due to exchange trading, which disturb the course of trade superficially, but have little effect upon its deeper movements.

The tides, which at certain times elevate part of the surface of the ocean, can be compared to that tendency in exchange markets which elevates the prices of commodities and securities above the level that they would otherwise seek.

The illustrations are given because there are those who find it difficult to understand how it is that prices can have a tendency upward and one downward at the same time, and how it is that a certain commodity can be in the midst of a bull movement which may last for years, and yet be subject to downward fluctuations from causes which lie only on the surface.

If the bull and bear tendencies which exert themselves at a particular time were capable of being reduced to figures which could be put upon the pages of a ledger, the bull agencies being put upon the credit side, let us say, and the bear agencies upon the debit side, and if the net resultant of the bull and bear agencies could be ascertained by striking a balance in the same way as from a ledger, then the manner in which the different opposing forces act could be readily understood. It is because of the common assumption that there can be only one economic factor which affects prices that the general misconception arises.

Summary of the Three-Price Tendencies

The actions of traders upon an exchange are the reflection of their psychological state, and therefore their weaknesses and foibles must be frankly recognized. Frequently they are rash, but at other times timid. Now they are rushing in with all the assurance of amateurs; now they are running with terror because of some bogey set up to frighten them. Their fickle nature is thus seen in the fact that they are always causing the eccentric minor fluctuations which are characteristic of the exchange markets.

The hopefulness of traders is shown in the tendency of the market to rise whenever any excuse can be given for a bull movement; while the fact that sound common sense and an accurate summing-up of values govern those who, by the law of the survival of the fittest, control prices in the long run, is seen when we realize that exchange trading, instead of causing wide movements of price, tends, quite to the contrary, to keep the market within bounds.

There are many fallacies which frequently occur in the discussion of the effect of exchange trading upon prices; and in the next chapter the principal ones will be considered, especially the widely prevailing and unfortunate fallacy that short selling tends to put prices down.

CHAPTER III

PRICES (*continued*) — SOME FALLACIES CONSIDERED

In order to arrive at a correct estimate of the value of organized speculation, it seemed necessary to review in some detail the principal tendencies which make toward advancing prices and which would result in an indefinite advance if it were not for the factors previously enumerated which keep the market within bounds.

It is to be regretted that this question is seldom discussed from the standpoint of the moral and social welfare of the community, but that the arguments used pro and con usually refer to the effects upon prices. It is further to be regretted that the arguments upon the effects of such speculation are but too frequently the mere offhand declarations of persons who have given the subject the most insufficient study. At times of declining prices the anti-optionist is full of assurance in attributing all declines to the action of organized speculation; and in his breezy manner, he even attributes the declines in the prices of commodities not traded in on the speculative markets to the same cause. But his opponents have an arsenal of facts behind them, and often get the ear of the public when they show the tendency of all exchanges to manipulate prices upward.

When commodities are advancing in price, however, the anti-optionists have an easier task. In such case they quickly shift their ground, and stoutly maintain, for the time at least, that organized speculation tends to put up prices. To prove this, they have only to refer to the numerous speculative booms with occasional corners and squeezes of the shorts as recorded in the newspapers, events which

naturally strike the popular imagination. In 1909 a newspaper controversy took place between Secretary of Agriculture Wilson and James A. Patten, of the Chicago Board of Trade, in which Mr. Patten was accused of manipulating prices upward. To this charge he retorted that he merely acted in board of trade operations as any merchant who anticipates price movements of any commodity by buying when prices are low and selling when they are high. While expressing no opinions as to the merits of this particular controversy, it is brought to mind merely to show how the exchange trader is called upon first to answer to the charge that he is putting prices down and then that he is putting them up.

As regards securities, their owners are of course anxious that they should advance in price, and the promoters and manipulators are especially glad to see high values for the securities that they are selling. It is to the interest of intending investors, however, that stocks fall to such a figure that they will pay a good income upon the market price. But a trader who thinks well of stocks is only too likely to invest all the quicker if they are advancing, and then he joins the ranks of those who are working for higher prices. Thus the interests of the financiers who float stocks are so apparent, their holdings awaiting digestion are so well known, and they are so prominent as leaders of the stock market, that even sophists seldom accuse them of seeking a decline.

But speculative commodities are not usually produced by leaders of the market. On the contrary, they are, with few exceptions, agricultural products; and, to the farmers who grow these crops, the distant exchange in the city may easily appear as the cause of any unsatisfactory prices that he receives. This jealousy and misunderstanding of the farmer is augmented by other jealousies in different elements of the business community; for, as explained elsewhere in this essay under the heading of "Monopoly," the

speculative element upon the exchanges is different from the controlling interests in the world of general trade and industry. These ill-mated commercial forces appear to work in harmony, it is true, but their coöperation is fictitious and more apparent than real. The speculative exchanges in their present imperfect state seem to bring forward their most repulsive aspects; while only the attentive student of economics can see their beneficent effects upon commerce, or the great good to the community which they are likely to accomplish in the process of evolution.

Hence it is that practical men look askance upon speculation on the exchanges, and all interests are ready to make it the scapegoat for any movement of prices which is not satisfactory. It so happens that, among the laity, and even to some extent among professional economists, the idea that high prices are good of themselves widely prevails; and it is therefore quite natural that the exchanges should be called upon to bear the brunt of the adverse criticism for declines in price. Even those who would benefit by lower prices are quite ready to cater to popular prejudice and accuse organized speculation of depressing values; while politicians see few votes that can come from brokers or their employees and many that come from those who do not understand exchange operations.

In the first part of the decade beginning with 1890, these different interests undertook a legislative campaign against organized speculation which was based almost entirely upon the alleged tendency of exchange dealings to lower prices. The different proposed laws introduced into Congress were principally directed towards curtailing short selling, as it was thought that this practice was the cause of the low prices that prevailed at the time. Also, in more recent years, similar legislation has been sought, directed in most cases against speculation in cotton. In the printed reports of hearings before different committees in regard to the proposed legislative measures, there can be found perhaps

more fallacies than in any other collection of economic writings. There appeared before the committees men who knew how to grow crops, to mill wheat, to spin cotton, and to pack pork, but who knew nothing of commerce in its broader sense or of the general conditions that make prices.

The Underlying Fallacy

The fallacy, which underlies most of the arguments of those who hold that organized speculation puts down prices, arises from fixing the attention upon the short seller and his sales, at the same time forgetting or minimizing the fact that the net tendency of the exchanges is to encourage buying and thus to furnish a speculative demand. The bear is seen offering to sell a commodity for future delivery; and his offerings appear, for the present, at least, to be as potent as a supply of the actual commodity; but the speculative buyer is not seen, as he bids for even greater quantities of "wind," which demand more than counterbalances the offerings of the short seller.

It would seem as though every form of human ingenuity were exhausted in the effort to prove that the seller has more effect upon the market than the purchaser. For instance, it is said that, when a short seller of wheat buys it in, such a purchase does not have as much effect as the original sale, because the purchase is usually made from some other short seller. But this argument is clearly a fallacy, and could just as well be applied to the long side of the market. Thus it could be said, when the long buyer sold out his contract, that in many cases he would be merely selling to another purchaser of a long contract. If the same species of reasoning were resorted to as in the other case, the supply which leads to this sale would appear to have no effect. Arguments, however, should be such that they will work either way.

Probably it is due to the idiom of our speech that there is so much fallacious writing and thinking upon this subject.

When a trade is effected in which one dealer buys a commodity which another sells to him, the transaction is called a purchase, if viewed from the standpoint of the buyer, or a sale, if viewed from the standpoint of the seller. And transactions upon a commercial exchange are referred to as "sales," perhaps because such an exchange is considered as a place to market or sell commodities. If it were our custom to say, for instance, that there were transactions in so many bushels of grain upon the board in such and such a time, many fallacies would be avoided. But in common speech the word transaction is not used in the above connection; for, if one trader bought, and another sold, a million bushels, the common way of narrating the occurrence would be to say that there was "a sale" of a million bushels, thus fixing upon the mind the idea that this grain was sold and ignoring the fact that it was also bought.

The business man knows business, because it is to problems in the field of trade that he devotes himself; and, for the same reason, he does not usually understand the niceties of language. Hence it is quite possible, by fixing his attention upon the sale side of a bargain, to convey the impression that a sale does not necessarily imply a purchase. This obliquity, due to lack of scientific training in the consideration of economic problems and to lack of practice in writing and speaking on such subjects, leads to fallacies in different departments of economics, particularly in discussing the tariff, but also in considering this question of transactions upon commercial exchanges. Hence we find it stated over and over again, in the different writings upon the subject, that sales depress prices; that so much of a commodity has been sold upon an exchange, and hence, so some of the writers say, any one with common sense can see that these sales must have their depressing effect.

It might be that buyers were bidding desperately in the midst of a corner; it might be that enormous quantities were being eagerly bought in response to exaggerated news

sent out by speculators, and that excitement had been worked to a tremendous pitch of recklessness by the methods of the speculative exchanges; yet those persons who fall a victim to the above-mentioned peculiarity of language would refer to these transactions, in which the eagerness of the buyers is so conspicuous, as so many "sales" of the commodity, which, so they reason, will depress the price.

It is not meant herein to imply that either the purchase or the sale is of itself the determining factor. On the contrary, it is the demand which leads up to the purchase and the supply that leads to the sale which cause fluctuations in price. The actual purchase and sale, or in other words the transaction, is but the seal which is put upon the condition of the minds of buyers and sellers at a particular moment, showing that the demand represented by a buyer and the supply represented by a seller have been merged in a transaction. The movements of prices are to be determined by analyzing the effect of demand and supply in the different circumstances found, not by considering the selling side only and then calling a transaction a sale.

Selling Four Times

The writer who perhaps has carried to the farthest limit the idea that a sale does not imply a purchase is Charles W. Smith, of Liverpool, England. In most respects he agrees with others who attack future selling; but his favorite doctrine appears to be that, under the future system, the crop is sold four times. Perhaps an excerpt from his writings will best illustrate how it is that the anti-optionists continually ignore the fact that purchases may be made of future contracts as well as sales. In discussing the possible introduction of the future system into the market for fruit, Mr. Smith says: "Instead of one crop of fruit being sold or forestalled, there would be four crops of fruit made out of the one. For example — first, the actual crop would be fore-

stalled by the sale of a Future to a speculator; secondly, there would be the resale of this Future; thirdly, there would be the unlimited crop sold by bears, etc.; fourthly, there would be the actual crop itself sold to the consumer."[1]

But Mr. Smith might just as well have called attention to the fact that some parcels of a commodity traded in upon the exchanges are sold hundreds of times. If one wishes to avoid fallacy in this respect he has but to remember that, for every time a commodity is sold, it has also been bought. Thus, in the case supposed in the excerpt, when the producer sells his crop in advance to a speculator, the crop is bought at the same time that it is sold, and this purchase may be on terms very favorable to the seller. For, when a purchaser buys in advance in this way, he does it, in many cases, because he is anxious to obtain a supply; and, when he buys under such pressure, an excellent price is often exacted. In the second transaction, when the speculator closes his future contract, this sale would have no more effect than his former purchase; and, under the future system, there is great buying power, in that speculators are always entering the market and frequently are ready to relieve any tired trader of his load. As regards the third sale, "the unlimited crop sold by bears," there is to set against it the "unlimited" crop purchased by the bulls on future contracts. The fourth sale, where the actual crop is sold to a consumer, would need to be made in any case; and, when it is made, there will necessarily be a purchase of the same.

The important question is: Does the introduction of the system of organized speculation add to the efficient demand or does it add to the efficient supply? The only answer that can be given is that both are enormously increased. The contracts manufactured upon the speculative exchanges have much the same effect as an increase in the supply of the actual commodity, inasmuch as spot prices

[1] Smith, *Commercial Gambling*, p. 131.

tend to follow the price of contracts. But the demand for these manufactured contracts comes largely from exchange traders and is equally efficient in affecting the price of the cash commodity. Hence the problem assumes the form of comparing the relative strength of the two conflicting determinants. Having brought the discussion to this point, there is one overshadowing consideration to be kept in mind: "The public are always bulls." This statement of the attitude of the great mass of speculators is only slightly exaggerated, and is admitted and emphasized by all market students. This enormous demand of the public is attracted to the speculative markets by the machinery of organized speculation; and it constitutes a buying power which even the great market leaders find it more profitable to encourage than to oppose.

The Offers to sell

There are many different ways of stating and varying the argument; frequently the anti-optionists argue that it is not so much the amount of sales actually made as it is the offers to sell which affect prices; further, they say that the offers are limitless and that it requires little or no capital to make them. It is difficult, however, for any one who keeps his head in such a controversy to understand how offers to sell can be made any more readily than bids for the property.

If the observer stands near the wheat pit, he will hear numerous offers to sell, so numerous that they appear almost illimitable; and the offers which are not accepted are much more numerous than those which issue in a contract. But, on the other hand, a listener will hear many bids, which are just as numerous on the average as the offers to sell. It should be remembered, of course, that purchases may be made upon the margin system as well as sales, and a given amount of money goes just as far in margining a buyer of futures as it does a seller; and the intending buyer

has equal facilities for making numerous bids, which may affect the market just as powerfully as the offers to sell.

Philanthropy

Another argument, frequently made to prove that there is some way by which the short sellers can get out of their contracts without making a demand for the commodity, is that it is imposssible for them to buy enough of it to make deliveries upon the enormous amount of short contracts open, and hence the buyer allows them to settle at a low price. If the disposition of the long holders of contracts were as above stated, the conclusion would readily follow. But, like many another false argument, the premises are wrong; and the fact that a philanthropic disposition is attributed to the long holders shows an utter failure to understand human nature as exhibited on a speculative exchange.

The speculators upon the Chicago market, and on other markets, are made of sterner stuff. Instead of making an easy settlement with a trader who cannot fulfill his contracts, their settlements are hard, indeed; and, furthermore, they use every means in their power to make delivery difficult if not impossible. This effort is one cause of the numerous corners and squeezes. If manipulators are attempting a corner in wheat, for example, they will send men into the country to buy all that they can from the farmers who own grades that might possibly be delivered. They will then send this wheat out of the country or fill the elevators with it; and while they are doing everything that they can to make the performance of the contracts by the bears impossible, they will bid for the wheat in the pit in the effort further to raise the price. Why would they do these things if they were willing to let the bears settle on favorable terms? The spirit with which they act is of just the opposite nature. Their effort is to corner or squeeze the bears, and they have no mercy.

It is true that when a trader finds himself cornered and

knows that there will be much expense in getting the wheat to make delivery, he will go to the cornerer and ask for a settlement. This will usually be granted, not through philanthropy or pity; but because the cornerer does not want to make himself unpopular with his fellow members, and because he does not wish to make the price of the commodity so high that the most extraordinary efforts will be made to bring it in, and also because — especially in recent years — there have been rules adopted on the exchanges which render corners and manipulations more difficult. Yet even this settlement is granted in about the same spirit with which a successful gambler gives a victim enough money to take him home. It is not done because it is impossible to make delivery, but for quite different reasons; principal among which is the fear that, if settlement be not made, the commodity will be brought in from the country or from other cities. Of course, in case of a corner, the farmers do often sell at high prices; but that is not what the cornerer desires, and he prevents it whenever he can.

In some instances, however, when the situation appears to be well in hand, he will refuse to settle. A corner in corn, which occurred some years ago, is called to mind in which the cornerers said to those who wished to settle, "Go into the pit and buy the corn. We are not running this deal through philanthropy." The spirit with which the trader does business is much the same in the case just given as in the case where he permits his victim to settle. The cornerer simply wishes to get the price of the commodity just high enough so that the belated short will buy of him, and yet not high enough to warrant the trouble and expense of going to others to get the commodity.

When a trade is canceled by the process of ringing out, as it is called, or through any clearing-house or settlement system, it is an evidence, not that the closing of a trade is impossible, but that the cornerer knows that it is possible to do it otherwise. For, if he could prevent others from

selling the commodity, and if he were not ready to sell it himself, he would let those who are being cornered keep on bidding in the pit, so that the price would be raised higher and higher, which is exactly what the cornerer wishes.

The Payment of Differences

In connection with the fallacy just discussed, another is frequently heard, to the effect that when a contract to buy and one to sell are set off against each other and settled by the payment of differences, the purchase contract in such a case has no effect in raising price. The most sensational conclusions are reached by this species of reasoning. It is said, for example, that millions of bushels of wheat are thrown on the market greatly depressing the price; that this wheat is never bought back, as it is settled by the payment of differences; and that therefore the idea that every sale implies a purchase is negatived.

The answer to such an argument is, that, in the case supposed, there is obviously important pressure to buy, and that the amount paid is in effect the difference between the previous sale and a present unfavorable purchase. If persistent demand be thus settled, it can hardly be said that it has no effect. When a short sale has reached the books of a clearing-house which clears commodities, however, there is no way to get it canceled except to make delivery or else set it off against a purchase. But to argue that the purchase in such a case has no effect is about as absurd as it would be to say that a credit of a certain amount on a ledger has no effect because perchance the account may balance. If some method be found whereby a purchase can be checked off against a sale, then these two opposing tendencies counterbalance each other. The book-keeping operation has no effect either way, except that a demand for a certain amount, and the supply for a certain amount, have been taken off the market.

Referring to accountancy, let us consider a slightly dif-

ferent example from that given above. Let us suppose a customer is charged $10 on a ledger and afterwards pays $10 in cash. The account is now in balance and the bookkeeper rules it up. Would it not be absurd for the customer to undertake then to argue that the $10 he paid had no effect because it only went to counterbalance the previous charge of $10? Or, supposing that a pound of flour is on one side of a scale and a pound weight on the other side, would it not be absurd to argue that the gravity of the flour had no effect because the scales were in balance? It is the same in a market where a demand for a certain amount and a supply for a like amount are set off against each other by a system of accounts. Each has its effect. The supply is diminished, and the demand is diminished, in like degree.

The Interest of the Parties

The commitments of the different traders in the market are of course important in determining on which side their influence is to be cast. A trader who is long will naturally give out bullish opinions; and, if his interest be large enough, he will sometimes go to much expense in order to spread news which favors higher prices. In the same way, a bear, who has committed himself to the short side, will naturally do all that he can to depress values. These facts are called to mind by the anti-optionists; and they also point out that the modern system of organized speculation provides a plan whereby a trader may have a direct interest in depressing prices.

But the important consideration in this connection is, that it is impossible to provide opportunities for the large number of purchasers brought into the market by organized speculation unless they be supplied by traders who sell for future delivery. Estimates are repeatedly being made by different parties showing the large proportion of the deals in organized markets which are of a purely specula-

tive character. If, then, the buyers brought in by organized speculation were confined to those traders who had the actual commodity to sell, they could not make their purchases. The comparatively small amount of the actual commodity coming upon the market would be quickly absorbed, leaving the great mass of intending purchasers to bid higher and higher in the effort to tempt those who had bought earlier to part with their holdings.

A market of this sort would doubtless be highly satisfactory to the producer, except for the fact that the state of affairs contemplated could be only temporary. As shown heretofore, purchases made purely for speculation must be unloaded at some time, and speculators are likely to tire of their holdings very soon. When they do, the effect of their sales would put the price to the opposite extreme — even to a point below the use-value of the property. Hence if short sales in wheat, for instance, were abolished, the result could be none other than that trading in that commodity would be controlled by much the same economic laws that govern real estate dealings at present. That is to say, the wheat market would be one in which there would be an occasional tremendous boom, perhaps once in fifteen or twenty years, and each boom would soon be followed by a terrible fall. After each decline would ensue a long period of dull markets mixed with abrupt or eccentric fluctuations. But there could not be another extensive bull movement until, as the real estate men would express it, "another crop of fools were born."

In order that speculation may be popular and continuous, the market must be made broad enough so that there is opportunity for a great number of traders on both sides. Organized speculation introduces this great mass of trading, and it overshadows the comparatively small trade in the actual commodities. As an illustration, let us suppose a market to which an average amount of 50,000,000 bushels of actual wheat is brought every year and sold to

consumers. Let us further suppose that organized speculation be introduced into this market with the vast horde of traders that go with it. Also, let us make the supposition — which is entirely reasonable — that they furnish a demand for 500,000,000 bushels for purely speculative purposes. But *ex hypothesi* there will be only 50,000,000 bushels which reach that particular market in the whole year. How, then, are these prospective purchasers to be accommodated? They would quickly buy the 50,000,000 of actual wheat at an advanced price, and then they would bid for 450,000,000 more at a further advance, leaving those who ordinarily purchase the 50,000,000 bushels for actual use to pay either a higher price or seek some other market.

It is readily seen from this illustration that there is no way to accommodate these speculative buyers of 500,000,000 bushels of wheat, except by a boom similar to those which occur about once in a generation in the real estate market, or else by providing a system whereby this immense demand may be satisfied by sales of short wheat. Supposing the latter solution of the difficulty to be the one selected, let us note its exact effects. The plan adopted has been simply to introduce organized speculation. The demand and supply for the 50,000,000 bushels of actual wheat in this market is not affected except indirectly; but the demand for about 500,000,000 bushels of future wheat has been satisfied by a supply of approximately the same amount.

It is not meant to argue that there would be transactions for exactly the amount mentioned or that the prospective buyers would exactly equal the prospective sellers. It is merely intended to make the supposition consistent with the probabilities, by assuming that, at the prices which would be likely to prevail, there would be buyers for 500,000,000 bushels of future wheat who would be satisfied by sales of an equal amount of short contracts. Or, the supposition is, to use a legal phrase, that the price would be

such that the minds of the buyers of 500,000,000 bushels and of the sellers of the same amount would meet; and hence the clearing-house would show that there were 500,000,000 bushels of the short wheat and the same amount of long contracts.

The illustration given should show the reader what organized speculation will do in such a case as that supposed. It has raised up buyers for 500,000,000 bushels of future wheat and sellers for the same amount; and we are now ready to consider the question of the interests which it has created. The anti-optionist can see the bearish interests of those who have sold short in the case supposed, but he cannot see the bullish interest of the buyers of the future wheat. Yet the bull element introduced by organized speculation is even more important than the bear element so introduced. This is because speculators are naturally bullish, and more of them seek to buy for long account than to sell short. This added net demand cannot be satisfied except by a greater or less rise in prices. As before explained, a rise due to a speculative demand of this character will be only a temporary one. Yet the tendency is ever present, and enables the producer to get higher prices part of the time than he would in case speculation were not so rife.

At the time when deals are consummated for future delivery, the amount of futures purchased must be exactly equal to the amount of futures sold, as the actual commodity does not figure till the time for delivery arrives. Thus, in the case supposed above, the demand for the 50,000,000 bushels of actual wheat and the supply of the same amount are not affected by the introduction of organized speculation, except indirectly as prices may be changed thereby. But as regards future wheat, the interest in depressing prices of the sellers of 500,000,000 bushels of short wheat only counterbalances the interest of the buyers of the same in putting up the price of the 500,000,000 bushels of long

futures; and it is a rank fallacy to suppose that, while the sellers of a certain amount are interested in a fall, the traders who bought of them are not equally interested in a rise.

The Strength of the Parties

Arguing further, the anti-optionists call to mind the fact that, while the public are usually bulls, the professionals are more likely to be bears. Starting with these premises, they argue, and with much reason, that the bear side has greater skill in professional manipulation behind it. This argument is no doubt the most effective one which can be offered in support of the doctrine that organized speculation depresses prices. Perhaps the easiest way to answer it is to refer to the comparison heretofore made between professionals making profits from amateurs in the speculative markets and the contest between the drover and the lambs he is driving. It would not be wise in the drover to attempt to control the action of the lambs in every particular. It is for his interest to allow them some liberty to play — some freedom of action. If he manages them in a cruel and arbitrary manner, they will sicken and die, and their carcasses will not be as valuable as though they were fattened for the slaughter. For a similar reason the fisherman allows the trout to play after he has been hooked; and on every hand we see instances in which those who are sure of ultimate control find it for their interest to allow a victim to have his own way for a time.

A similar policy is advisable in the contest that takes place between the professionals and amateur speculators, who are well named the lambs. The professional must arrange his campaign so that he will ultimately triumph; but he must often stoop to conquer. Furthermore, he is not always successful at first. The speculator, if he wishes to be permanently successful, must adapt himself to changing conditions as they are presented; and he must have infinite tact and learn not to press an advantage too far. The names

of numerous speculators are called to mind who were successful as bears for years at a time, but who ultimately lost all in a prolonged bull market. In order to be successful, therefore, it is necessary to conform most of the time to the wishes and prejudices of the mass of speculators, even though they may be unskilled, and carefully to select the time for opposing them.

Obviously, then, it is the expedient policy of the professionals to give the amateurs full rein, and to encourage them to speculate on the side of the market that they wish. The professional is not always a bear; it is for his interest part of the time to be a bull, and it is especially for his interest to turn and be a bull when the bear party becomes too large. His efforts are directed to persuading traders to purchase, and he endeavors to rush up prices so that he can sell on the rise. This policy increases his profits and makes a top-heavy market, which is almost certain to go down from the liquidation of the numerous buyers who soon tire of their holdings.

It would be extremely unwise for the market leader to attempt to force the prices of commodities below their cost of production. He could not tell at what time a rival manipulator would load up with long stuff and then, perhaps taking advantage of some crop damage report which brought the public into the market as bulls, would scare bear traders into covering and ultimately ruin the bear leader himself. Such catastrophes have been known to occur; and any speculator, even though he have great power in the market, shows his wisdom by conforming to the prejudices of the amateurs rather than in going against them. Manipulative purchases may often be made with good chance of profit above the legitimate value of a commodity; but seldom or never is it good policy to make sales below it.

In this connection it is sometimes said that the professional seller can tire out the buyer; and hence, when the

short is covered and the long liquidated, it will be at a low price. Considering only the question of capital, it is no doubt true that the professional has greater strength than the outside speculator, and has enough money to margin a deal farther if he wishes to. But there are other considerations which make it bad policy for the bear to protect a selling contract indefinitely. Indeed, the right to deliver a commodity at a certain time can hardly be made as an investment or so considered.

The expression "investment seller" has been coined, but one can scarcely hear it mentioned without a smile; and it seems almost incongruous to consider such a mere contract to deliver as property of any sort. Looking at a trader who considers a short sale as a kind of investment, the fact might be noted that the short seller of stocks is not obliged to pay interest, but he must pay any dividends declared on the stock that he has sold. In grain and other commodities the short seller can usually, in case there is a large stock of the commodity on hand, transfer from one option to another at an advanced price, and thus make the carrying charges. In some years these carrying charges have been so large that many have made an excellent income by thus keeping out a short line and changing over to a far-away option as delivery approached.

But such a method of investing is extremely treacherous. Any kind of a squeeze or corner will start the near-by option to going upward; and the investment seller must buy in his short at an advanced price or find the commodity for delivery. Furthermore, in such a case, when he undertakes to sell the far-away option in order to recoup his loss, he is likely to find it quoted, not at a premium but at a discount. Investment selling is so dangerous that the term itself is a misnomer; and all short sales, if made on organized markets, should properly be called speculation.

Indeed, it is recognized on all sides that the short contract is merely a temporary speculation; and shorts can

usually be run to cover much more easily than bulls can be forced to liquidate. A long contract, however, can be turned into the solidest kind of an investment if the purchaser merely puts up enough money to pay in full for the commodity or security and takes the same off the market. Such being the facts, is it not fallacious to maintain that the seller has any special facilities to tire out the buyer, or that there is such strength in the position of a bear in the market that he has any preponderating influence?

Different Seasons

Some of those who hold that organized speculation has a tendency to lower the prices of commodities traded in, at times vary their charge by saying that it is at certain seasons that prices are lowered, especially at the time of the year when the crops are coming to market. The inference would be that, in the absence of speculation, at the season for marketing, the commodity would naturally have the lowest price. The crops must be stored and carried till the time for consumption arrives; and, at market time, the large buyers, knowing that their purchases constitute the principal demand, would hold back their orders till the producers were willing to sell at the lowest price.

But when we have organized speculation there is a great body of traders dealing in futures, thus creating a demand for the same, and the cash market sympathizes with the market for futures. This great demand for speculative purposes has an overshadowing influence; and hence the demand and supply for the actual commodity is not so potent. The fluctuations, therefore, which would otherwise be noted, owing to seasonal scarcity or abundance, are not especially pronounced.

In Table IV in the Appendix will be found the mean price for wheat for each month during the first decade of the present century. Also the average price is given for each month of the whole decade, so that the reader can compare

the averages of any month with the like averages of any other month and form some estimate of the seasonal variations in price. In Table V like computations are given for corn, also for the decade 1901–1910. The prices both of wheat and of corn are those which prevailed in Chicago. In Table VI we have the average monthly prices of middling upland cotton in New York for the decade 1900–1909. And in the same manner as in the tables for wheat and corn, the average for each month for the whole decade has been computed, so that any seasonal variations in price can readily be seen. The averages for wheat, corn, and cotton derived from these tables are placed together in graphic form in Diagram IV, the purpose being to make any seasonal movement of prices as plain as possible. It will be noted that there is a tendency toward lower prices at the time for marketing and that advances are more likely to occur at other times of the year. But the point especially worthy of notice is that this advance, on the average, is but a moderate one, and is scarcely more than enough to pay for the cost of carrying.

Examining the diagram in detail, we note that wheat shows the smallest seasonal variation. Indeed, when we consider the cost of carrying the cereal, the prices given during August and September are no doubt the best of the year. Wheat is a commodity in which there is much speculation, and the effect of it is seen in the remarkable evenness which the market holds as regards price variation during the different months.

There is much less speculation in corn than in wheat, and hence the reader should not be surprised to see that there is a greater difference in price between the seasons. The months of the year in which the new corn comes upon the market are seen to be the lowest; and it is probably a fact that the high months show enough of an advance more than to compensate for the carrying charge. However, doubtless owing to organized speculation, any such difference is very

small; and the good effects of speculation upon the corn market are seen in the fact that the price is able to hold up so well in the face of the enormous receipts that come on the market during the winter months.

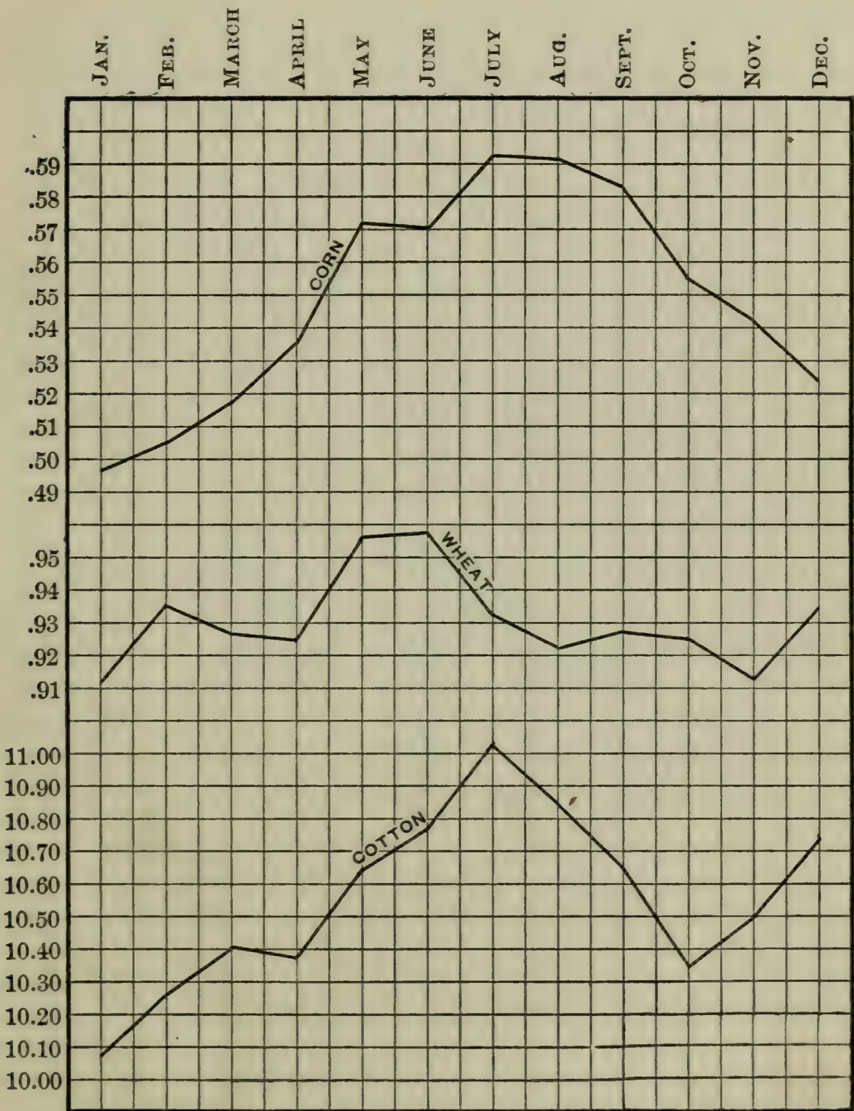

DIAGRAM IV

PRICES OF WHEAT AND CORN 1901–1910 AND OF COTTON 1900–1909 AVERAGED BY MONTHS

The curve representing cotton is seen to fall considerably at marketing time, which is perhaps more than can be attributed solely to the carrying charge. Speculation in cotton, as has been shown above, is subject to certain difficulties that do not belong to other forms of speculative dealing, which perhaps explains why it is that the marketing of the crop has a greater effect than in the case of a commodity such as wheat.

In general the tables and diagrams show the remarkable effect of speculative demand in holding the prices of commodities firm at marketing time. It may perhaps puzzle some readers to understand the importance of carrying charges, or why it is that the values of commodities vary with different seasons of the year. As a familiar example, let us consider potatoes. Every one expects them to be higher in price in the spring and early summer than at digging time; and the reason, as every one will agree, is because, owing to their bulk, it costs much to store them, and there is much loss from decay and other causes. Wheat, corn, and cotton are not bulky as are potatoes, and there is not nearly so much wastage in keeping them. But wheat elevators, corn-cribs, and cotton warehouses are costly, and there is some loss, besides insurance premiums and interest on money, which brings the carrying charges up to such a figure that they must be carefully reckoned with.

As corroborating the position here taken, the testimony of Mr. Pillsbury, quoted in a subsequent chapter,[1] might be referred to, in which he says that millers formerly made considerable profit by buying wheat in the fall at the time of heavy deliveries, and carrying until the time when the state of the roads prevented the deliveries from being as large. But since the system of dealing in futures has been introduced, the profit of the millers is not so great as formerly, because they do not have the favorable oppor-

[1] *Cf.* pp. 174–175, *infra.*

tunities which they previously enjoyed for making cheap purchases of wheat at the season when most of the crop comes upon the market.

Referring to Tables I and II of the Appendix, which give the extreme prices for wheat and corn and the months at which the high and low prices were reached, we find, as would naturally be expected, that the extreme low of the year is usually when the crop is coming on the market, and the extreme high is usually in the spring months. However, as exceptions which tend to bring down any average, we might note that in the wheat market, the month of September is mentioned as being a high month five times and as being a low month but twice. Furthermore the Hutchinson corner in 1888, when wheat went to $2 per bushel, occurred in September. As for the Leiter corner, it powerfully affected prices during the summer and autumn months, so that December was the highest month in 1897, although the high point of $1.85 was not reached till the following spring, the decline being rapid from that point.

Little is to be found in the diagrams and tables which can be construed as giving encouragement to the farmer to store his crops with a view to selling at the time when receipts are lightest at the market centres. If a farmer be not already equipped with granaries, corn-cribs, and other warehousing facilities, he must build them; and there is deterioration and risk of many different kinds involved in thus carrying his crops. Furthermore, the average in the spring months is brought up by corners and squeezes of which it is sometimes difficult to take advantage. Since few farmers specialize as speculators, it would be better for most of them to sell immediately at harvest-time, leaving to speculators upon the exchanges the uncertain profits which come from running risks in regard to fluctuations in price.

Statistical Fallacies

As just pointed out when examining the effects of speculation upon the relative prices paid for commodities at different seasons, the anti-optionists are careful not to give figures or enter into any formal statistical argument. There are, however, statistics which they sometimes appeal to, which, on their face, give plausibility to certain of their theories. The favorite statistics used in this connection are those of the general fall in prices which characterized the period between 1873 and 1897. There were times of rising prices during these years, but the tendency most of the time, as all admit, was decidedly downward. It so happened, moreover, that the custom of dealing in futures in agricultural products, while of course a gradual development, assumed the form of a regular feature of the markets at about the year 1870. Hence the coincidence in time with the fall of prices gives some plausibility to the argument.

In order to make the above argument impressive, however, it is necessary to forget or ignore two important economic facts. The first is that the prices of commodities which are not traded in upon the speculative exchanges likewise declined at that period; and the second is that, beginning with 1897, the tendency in all commodities has been decidedly upward, the advance being led by the agricultural products traded in upon the speculative exchanges. The reader has but to refer to Diagrams V, VI, and VII in order to see the tremendous rise in the prices of wheat, corn, and cotton at that time. The fact that commodities subject to organized speculation should decline more than others when average prices were falling, and rise more than the average during a general advance, proves nothing except what all should be familiar with, that those commodities which have been selected for speculative purposes are naturally ones the values of which are most fluctuating.

The Question of Commissions

Among the sweeping assertions of the anti-optionists is one that the commissions for trading in futures are paid by the producers of the commodities called for. It is almost impossible to argue the question with them, because they never give proof or indicate in any way by what possible line of reasoning they arrive at the conclusion. Their easy method of settling the question will not bear examination; but the problem of who pays the commissions is an interesting one, and, in solving it, we find that the facts are grouped a little differently than in other departments of economics.

As for the commissions upon the actual commodities when they are shipped to the board of trade, let us say, and sold by sample to a miller or exporter, they are ultimately paid by the same parties who would pay commissions and other expenses if the board of trade did not exist. They are paid by the same parties that pay any part of the cost of distributing or producing commodities.

As for the commissions upon the purely speculative deals, the question would be answered differently by different people according to the respective positions taken in regard to the nature of those transactions. For those who believe that trading in contracts to deliver commodities is pure gambling, and that no deliveries are ever made upon such contracts, or those who deny that the contracts have anything whatever to do with actual commodities, the position might consistently be taken that these commissions are paid by the same class of persons who pay the expenses of a gambling-house, namely, the patrons of the house — the players. It is difficult to understand how any one who takes the above position can consistently say that the expenses of trading are paid by the producers. They might as well attempt to argue that the percentages made by the book-makers on a race-track are paid by the farmers who breed the horses.

Moreover, opinions differ among the anti-optionists themselves. Not only do they differ as between individuals, but the opinions of the same anti-optionist, like the market that he is always dreaming about, may fluctuate constantly according to the exigencies of the moment. Indeed, there are few, if any, who stick consistently to the proposition that organized speculation is pure gambling and that no deliveries are ever made upon futures. Many of them will make assertions to this effect; but, perhaps the next minute, they will be saying something which is absolutely inconsistent therewith. Most of them, in so far as what may be called their leading ideas can be separated from their various inconsistent assertions, take a position somewhat similar to that of this essay, namely, when traders are buying and selling according to the custom of the exchanges, and when contracts are sold to others before delivery is made, the thing, which in most such cases is being traded in, is contracts.

But if anti-optionists agree with those of us who think in this way, then the same principles should apply as in the case of any trading in contracts to pay or deliver. Thus, if an investor buys a promissory note, or a mortgage, or a railroad bond, it is rightly assumed that the question of who pays the commissions is to be determined in the same manner that would be pursued in regard to any investment. Promises to deliver commodities are no different in this respect from promises to pay money. When such an obligation is bought, it is absurd to go back of the contract traded in and say that the producer of the commodity which the contract calls for is the one who pays a commission for its transfer.

But the anti-optionists do not stick consistently to the idea that trading in futures is usually trading in contracts. Frequently, indeed, we find them saying that the contracts have nothing whatever to do with the commodities called for; but, at other times, they appear to conceive of them as

a kind of substitute for the commodity. Thus they are never tired of saying that a contract to deliver wheat, if thrown upon the market, will depress the price of wheat. In so far as such a statement means that the market for actual wheat sympathizes with the fluctuations of the market for futures, they are right. But establishing the point just stated is not proving that the commissions for trading in a contract are paid by the producer of what the contract calls for.

The money market and the market for securities are related in their fluctuations; but when an investor or speculator buys a railroad bond, the commission on the transaction is not to be paid by the gold miner who produces the gold which the bond in its ultimate analysis calls for. If, for the sake of argument, we consider the supply of what is called "wind" wheat as a part of the supply of the actual commodity, then there is no more reason for saying that the part which the farmer produces pays the expenses of producing the "wind" part than there is for saying that the producers of the "wind" pay the farmer's cost of producing the actual wheat. In truth, however, each helps the other; for the large amount of both kinds of trading enables the commission man to do a larger business and to do it more cheaply.

Clearing-House Transactions

The resemblance between the methods by which paper representatives are used to take the place of commodities in transactions upon the exchanges and their like use in finance is so obvious that it is an excellent argument for identifying the two classes of transactions; since organized speculation rests its case on the fact that it is a modern system and exemplifies the best and most economical methods of dealing. The statement is made, however, that real money is behind every note, check, or draft in a bank clearing-house; while upon the speculative exchanges, by the

ringing-out process, the delivery of the commodity is dispensed with.[1]

But the statement is a mistaken one. Indeed, the striking feature in modern finance is that actual money plays such a small part in doing the work of making transfers. By examining any bank statement we see what a small proportion the actual money on hand bears to the total amount of either the deposits, the loans, or the clearings. In truth, the analogy is perfect between the forms of modern banking and the manner in which representatives take the place of commodities upon an exchange.

In banking the depositor has the right to demand gold or legal tender for every dollar of his deposit. A few depositors do make such demand; and, if paid in paper legal tenders, they are redeemable in actual gold. But the deposits of a bank far exceed in amount the money available to pay them, and very few depositors want the money itself. The deposits exist upon the books of the bank, and are transferred from one account to another or from one bank to another by the different financial instruments.

It is precisely the same in principle with futures upon the board of trade. The seller is in all cases obligated to deliver the actual commodities called for by the contract, which he may do by warehouse receipts. In some cases the buyer does insist on getting such delivery, and uses the warehouse receipts to draw out from the elevator or warehouse the wheat or other commodity, whatever it may be. But in most cases purchases and sales are checked off against each other by modern accounting methods; and intangible promises are thus made to perform the purpose of actual transfers of commodities in the same way that all the instruments of modern finance are utilized to save the handling of actual gold in monetary transactions.

[1] *Cf. Testimony before Committee on Agriculture*, House of Representatives, 1st Sess., 52d Congress, p. 286.

Hedging misunderstood

The purpose of hedging, as before explained, is to provide compensation against loss in a business transaction by making a deal of a different nature which will pay a profit, or at least remain intact, at the same time that the first deal is showing a loss. The anti-optionists fail to understand such a transaction. They think, or some of them do, that the hedging deal is a separate trade and has no connection with the original one. For instance, Mr. W. E. Bear, in condensing and re-stating the opinion of Mr. C. Wood Davis, says that after a receiver "has bought a quantity of grain he hedges by selling a future against it, and he has no further interest in the price of the actual grain, while he has an abiding and intensely absorbing interest in depressing the price in order that he may buy in his outstanding contracts at a profit."[1]

In answering, it may be admitted that, considering both deals together, the hedger, after he has made them, has no further interest in the price except in so far as the original deal and the hedging deal may not move exactly in harmony. But, according to the critics just quoted, the two deals apparently do not stand together in the mind of the hedger; for it is declared that he has no further interest in the price of the actual grain, but at the same time he is very anxious to make a profit on his short sale.

Perhaps a practical example will best bring out the fallacy of this argument. Suppose the receiver buys wheat at $1 per bushel and sells against it at $1.05. Suppose further that the cash wheat and the option each decline 10 cents. The cash wheat would then be 90 cents and the option 95 cents. The dealer, who is so intensely interested in seeing the price of his future go down, now has a profit on it of 10 cents and a loss on his actual wheat of the same amount. He closes both deals, and receives the account of

[1] *Journal of the Royal Agricultural Society*, vol. IV, Third Series, p. 305.

purchase and sale from his broker. This shows that he has made 10 cents per bushel in his transaction in futures. But, when he examines the account of his cash transaction, he finds that he has lost 10 cents per bushel; and hence we see the absurdity of supposing that he has no interest in the price of actual grain.

Either the deals should be considered together or they should be considered separately. If they are considered together, then the hedger has no interest, or little interest, in the fluctuations in the price of either futures or actual wheat after he has hedged. But if they are to be considered separately, then he has an intense interest in getting a profit on his short sale and an equally intense interest in getting a profit on his long purchase. Thus his interests in the market balance; which brings us back to the original proposition, that after he has hedged he does not wish the market to go up any more than he wishes it to go down. But when we fail to realize this balancing of interests, and assert that he has no interest in his long deal, but at the same time is greatly interested in his short deal, the height of absurdity is reached.

Restricting Trade

It is seen from the position taken by different writers and business men, as discussed above, that the fault which is most often found with organized speculation is that it favors short selling. But it would appear that when the liberty either to buy or to sell, according to the opinion of the trader upon the market, is restricted, the idea of a free exchange has been lost sight of. For organized speculation exists in order to make prices; and the principle on which it is based is that the best method to give freedom in price-making is to afford the greatest facility to all parties to make such bids and offers as they wish.

When you give people the impression that you are afraid that they will do a certain thing, you increase their desire

to do it. Parents and guardians keep this idea in mind while training children, and the principle is worthy of being considered by older people as well. It is applicable in small business enterprises as well as large ones, and it becomes especially important in banking. The bank officer who wishes to avoid a run on his institution never does so by informing his depositors that the bank cannot, or will not, pay them. On the contrary, unless the bank actually suspends payment, he is loud in his protestations that he is perfectly willing to pay all depositors in full.

Returning now to the speculative markets, it may be said that if you diffuse in the minds of the speculators the idea that some one is afraid they will sell too freely, you create distrust at just the time when it is most harmful. In the excitement of a bull campaign, this distrust might not show itself at first; but when the tide turned, and the numerous long holders began to realize, it would suddenly be remembered that an important class of sales had been prohibited, that the steadying effect of the covering of shorts would then be absent, and that all the long buyers who had contributed to the advance must engage in a frantic scramble to sell. Thus a one-sided market is one-sided going up and one-sided coming down. It is impossible to make the market so that all deals must in every case be purchases. By attempting such a thing the principal effect is to bunch the persistent buyers at one time and the persistent sellers at another. The only method by which this condition can be avoided is to permit such freedom in trading that selling and buying stand on the same plane, so that one may sell before he buys or buy before he sells with equal facility.

Commerce is Natural

To attempt to interfere with commerce and to mutilate, bind, and restrict it so that it may be made to go at the certain kind of a hop, skip, and jump that its trainer wishes,

is a fallacy. It may apparently perform these antics, and they may be curious in the same way that the acrobatic feats of men and animals are curious. Yet the units in the world of trade and production do not best accomplish their daily tasks by relying on commercial gymnastics.

Commerce acts best where it is free; and the attempt, particularly so to restrict it that purchases and sales do not stand on an equal footing, has been made by nations with unfortunate results. There must be a sale with every purchase. It is trade that makes trade. If speculators know that they may sell when they wish, they will be able to buy with better discretion; and their action both in buying and selling will be better distributed and serve to steady the market. The Mercantilists thought that they could so arrange things that certain people would do most of the buying while certain others did the selling; but their efforts to accomplish the results hoped for were futile. Reciprocal action must be appreciated if there is to be freedom of trade, and the true effect of bargaining cannot be realized if there be restriction at any point.

The Legitimacy of Fluctuations

It is perhaps because of the manner of doing business upon a speculative exchange — because of the very absurdity of men standing about and shouting business propositions at one another; or conceivably the temptations into which the speculators are led is the reason; or possibly it is because the deliveries of actual commodities upon an exchange are so few; or, most likely of all, it may be because those who lose money in speculative operations wish to attribute their losses to any cause but their own folly; — for some or all of these reasons the impression has become common and it is frequently stated that the quotations which issue from a speculative exchange are not legitimate, and that they are merely used for the purpose of deceiving people. Those outside exchange circles get their ideas from

various sources which exaggerate the power of prominent traders, and the rank and file of speculators believe, or pretend to believe, that the commission houses are in league with the market leaders, that the position of the traders in the market as to whether they are long or short and the size of their margins is communicated to these leaders, and that they then put the market to such a place that the greatest number of accounts will be frozen out. And each speculator thinks, or pretends to think, that his own particular account is the one for which they are especially gunning.

Before considering these charges, it should in all fairness be admitted that other forms of business, as well as the purely speculative ones, are subject to arbitrary and unnatural methods in fixing prices. Beginning with the large trusts, and passing to those combinations which exist among milkmen, cab-drivers, and even among professional men and laborers, we can readily see that there is no profession or employment in which the buyer and seller come together in exactly the manner assumed by the classical economists, or in which they buy and sell only according to the motives which actuate the supposed economic man. Custom plays a larger part in fixing prices than many imagine; and sentiments, both good and bad in a moral sense, are always having their effects in making prices and directing trade. But the faults of the exchanges as price-makers are not similar in all respects to the particular faults which result in artificial prices in outside business; and neither those who are unfamiliar with exchange operations, nor those who are embittered by the loss of their money, are the ones best fitted to make an impartial criticism.

However, many of the arguments advanced by critics must be admitted to have weight. It is true that there is manipulation of prices; and it is also admitted herein that some of the fluctuations in the prices of future and other contracts are not due to legitimate changes in the value of

the commodities which are ultimately to be delivered; that many of them are due to changes in the value of contracts considered as counters in the game of speculation, and that primarily what the parties are really trading in is contracts.

Having admitted so much, it would appear to many persons that the whole criticism of exchange operations is conceded. Yet trading in promissory notes, bonds, and other contracts is not considered illegitimate if done outside exchange walls; and many who do not call to mind this fact adhere to the fallacy that, if trading be really in contracts, then the demand and supply of the actual commodity called for can have no effect upon the quotations that issue. The question is a difficult one, and perhaps a practical illustration will throw some light upon the matter.

Let us suppose an extreme case — that a clearing-house which clears grain has 1,000,000 bushels of a particular long wheat future upon its books and 1,000,000 bushels of the future short, and that there is only a possible supply of 100,000 bushels of actual wheat in the local elevators, or within such distance that it is practicable under ordinary circumstances to ship it in and use it to make deliveries. To some it would appear that a "natural corner" would result at once; for, so they would say, the shorts would begin bidding for 1,000,000 bushels to fill contracts, and the 100,000 bushels of actual wheat would scarcely count in the scramble. To the anti-optionists it would appear, on the contrary, that, under the conditions supposed, the holders of long contracts would attempt to sell them; and, finding no buyers, the decline would be tremendous.

In actual practice, both of these theories would be partially right, and both would be partially wrong. Some, but not all, of the shorts would wish to cover, and some, but not all, of the longs would wish to liquidate. And there would be new long deals made, and also new short deals, mixed indistinguishably with the others. As the time for delivery

approached, however, both longs and shorts would be changing over to a more distant option; and, when the month for delivery actually arrived, there would be comparatively speaking but a small amount, either of long or short wheat, open. The 100,000 bushels of actual wheat in the case supposed would then be sufficient in most years to make the few deliveries desired. The explanation of the quiet accomplishment of this result is found in the fact that so many of the long future contracts had rung out with so many of the short contracts that there was only a small amount of wheat which was required to be delivered when this process had been accomplished.[1]

By duly considering the fact, therefore, that the average speculator settles his long contract by selling a short one, and settles his short contract by buying a long one, it is seen that the purely speculative business nearly balances itself; and that the demand for, and supply of, the actual commodity is an influence of the first importance. The different factors mentioned in this essay and others of less weight will in the end have their effect. The shorts would be the most anxious to close their contracts; but the longs, also, would be frequently stampeded. The hopes and fears and the different subjective estimates of the various parties in regard to the value of the contracts would result in the short choppy movements of the market. But neither bulls nor bears would all be likely to attempt to do the same thing at the same time; when a bear rushed to cover, he would in most cases find a bull who wished to liquidate at the prevailing price. When long periods are considered,

[1] "It may be urged that the same quantity of wheat, which would have been sold but once by the farmer, is now offered first by the farmer to the short seller, next by the short seller to the long buyer, and finally by the latter again to somebody else, thus swelling the apparent supply and tending to lower prices. But in all such cases the fictitious supply has been met by a fictitious demand, which have all been balanced long before the month for which the contract had been concluded has arrived." *Report of the Industrial Commission*, vol. VI, p. 190.

however, and also the wider market movements, the demand and supply of the actual commodity would have an influence much greater than any other factor.

Some of the sellers of futures would insist that they be permitted to deliver the actual commodity; and some of the buyers would insist that the actual commodity be delivered to them. Combining this supply and demand with the supply offered by producers and the demand from consumers, we have the element which varies the most and the one which would be more likely to turn the scale than any other.

This theory of prices upon a speculative exchange is abundantly borne out by statistics. Laying aside the gusts and eddies of speculation and the choppy movements, it will be found that, notwithstanding the manipulations that take place, the prices of commodities vary with the demand and supply as shown by the net visible supply in store.

In Table VII of the Appendix will be found the mean prices of wheat in Chicago, computed separately for each month, and averages taken for each year ending with June 30. Table VIII gives the visible supply in this country and Canada, not disposed of with reference to ultimate destination, but easily obtainable to influence the market or to supply any unexpected demand, as it was reported for the first of each month in the years named, also the visible supply averaged each year ending June 30. In Diagram V is shown a curve representing the yearly average prices as given in Table VII and another representing the variations in the visible supply as given in Table VIII. The curve representing the visible supply has been reversed, so that, when it bends downward, it shows that the supply is growing larger, and when it bends upward, a smaller supply is indicated. The reason the curve was made to vary in this way is because an increase in the visible supply is a bearish indication, and a decrease is a bullish indication. If, then, the price of wheat goes down with an increase in the visible

supply, and goes up with a decrease, the curves as arranged would indicate it, and suggest that the market did move in harmony with the demand and supply as revealed in the visible.

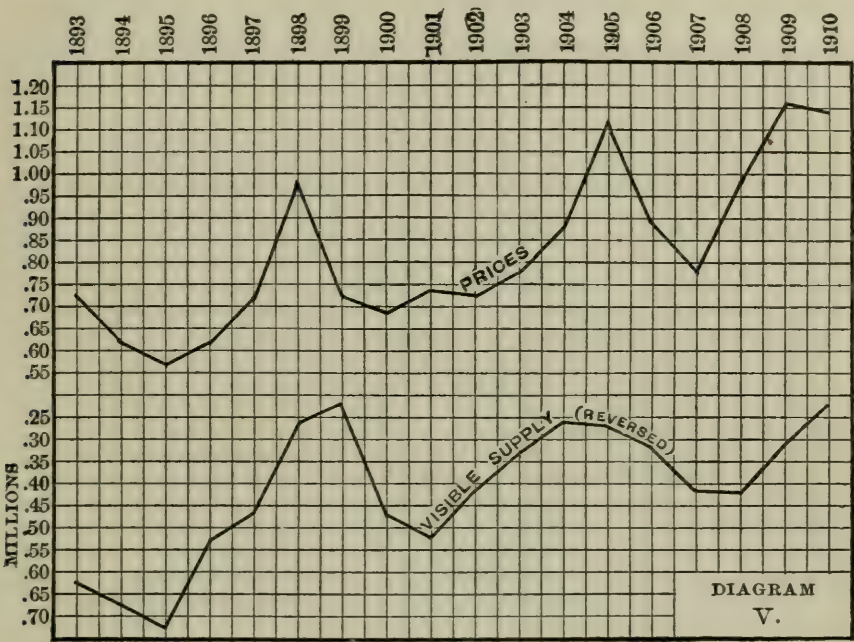

DIAGRAM V

Average Prices of Wheat and Average Visible Supply (Reversed) Years ending June 30

By examining the diagram the reader will see that, while there is by no means a proportionate variation between the two curves, their most important movements are coincident. Furthermore, it is seen that prices have a tendency to move sooner than the visible supply, thus indicating that the market leaders, from the reports of crops and acreage, together with other indications of prospective change in demand and supply, were able to predict what the visible would be, and hence to initiate a price movement before the demand and supply of the actual commodity were reflected in the visible.

In Tables IX and X, of the Appendix, are given the

prices of corn in Chicago and the visible supply, compiled in the same manner as the previous tables. In Diagram VI we have curves arranged similarly to those in the preceding diagram, with a result almost as striking as in the case of wheat.

In Table XI we have the average monthly price of middling uplands cotton in New York, and in Table XII the

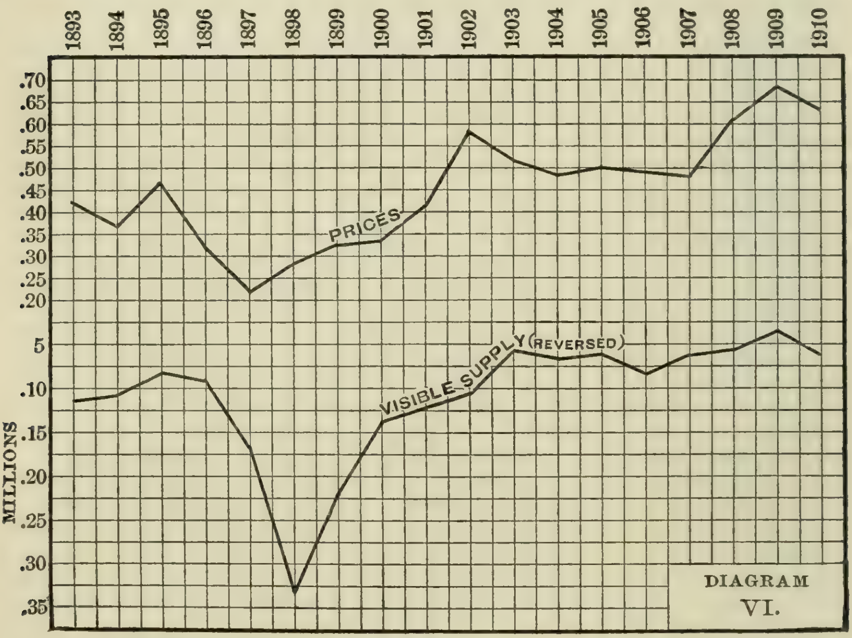

DIAGRAM VI

Average Prices of Corn and Average Visible Supply (Reversed) Years ending June 30

visible supply of American cotton, the year ending on August 31 with the crop year. These statistics of cotton are presented in graphic form in Diagram VII. Notwithstanding the Sully campaign and other manipulations, we find that the prices of cotton also vary with the demand and supply of the commodity.

In considering the prices of stocks and securities, it will be noted that the question of whether they respond to the

demand and supply for such investments cannot be determined in a similar manner, as there are no statistics of the amount of securities awaiting digestion. But it can be shown that the average prices fixed for them upon the stock exchange respond to the legitimate influences which should and do govern their values. Among the influences

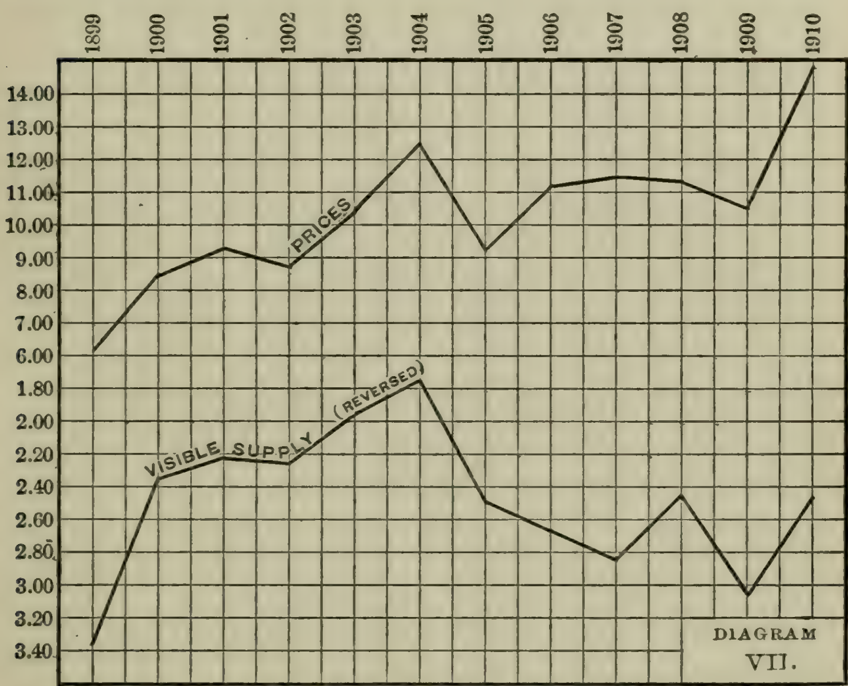

DIAGRAM VII

Average Prices of Cotton and Average Visible Supply (Reversed) Years ending August 31

that should determine the legitimate value as an investment of a railroad or industrial stock, the dividend that it pays, and the prospects for future dividends as revealed by its earning power, are no doubt the most important. In stocks, as in commodities, there are numerous false moves in prices, and many cases in which a stock will fail to conform in price to a legitimate influence. When, however, the prices of a number of stocks are averaged, and when the

principal controlling facts just mentioned are carefully calculated, we should not be surprised to find that prices fixed upon the stock exchange are governed in their wide swings by legitimate influences.

In Table XIII, in the Appendix, will be found the average relative prices of forty common stocks for the years designated ending on June 30. The stocks which enter into these averages comprise thirty-five railway stocks and five express, steamship, and telegraph stocks. The quotations were taken from the "Financial Review," and were averaged under the direction of Wesley C. Mitchell. The railway dividends per mile and the net income of the railways per mile, which also appear in the table, were reduced to relative figures on the basis of averages for 1809–99 by the same writer from the "Reports of the Interstate Commerce Commission." [1]

The statistics have been placed in graphic form in Diagram VIII, so that the relation of cause and effect between the different factors can be readily traced. It is seen at once that the prices for stocks respond to the legitimate market influences as well as to the prices for commodities. The movements are not proportionate in stocks any more than they are in the case of commodities; but the facts which should naturally determine values are obviously reflected in the prices. It will be noted that the income of railroads affords perhaps a better reliance than the dividends. For instance, it will be seen that the panic of 1903 resulted in a depression in prices shown in the year ending June 30, 1904, and that there is also a decline in the income of railways at that date, whereas the dividend rates suffered no average decline. But the obvious explanation is found in the custom of American railway officers in keeping the rate of dividend on their properties as steady as possible, and not varying it either up or down to suit all changes in income.

[1] *Journal of Political Economy*, vol. 18, p. 369; vol. 19, p. 298.

As stated heretofore, the influences mentioned are not the only legitimate ones. For instance, the average return

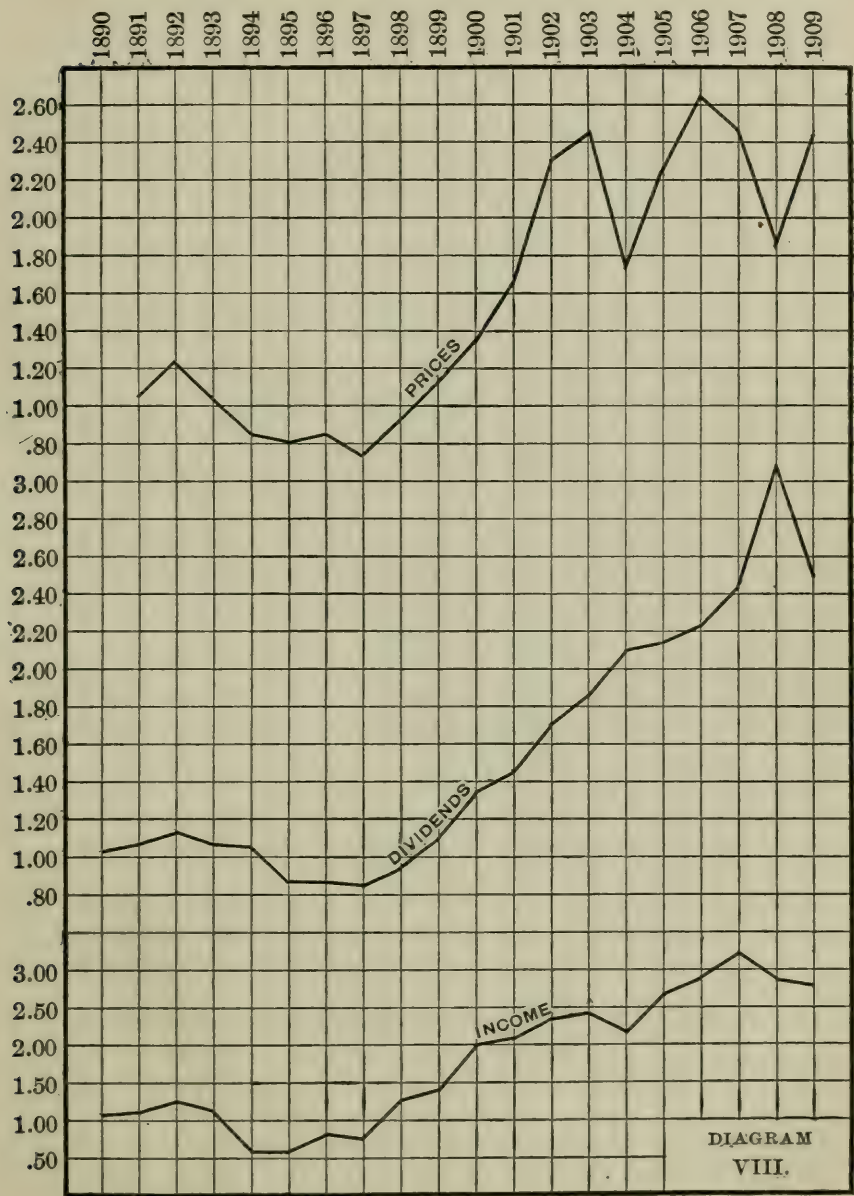

DIAGRAM VIII

Relative Railway Dividends, Net Income and Prices of Stocks Years ending June 30

upon capital is important, and the condition of the banks throws much light on certain financial conditions which go far to account for market movements. Referring to the decline after the panic of 1907, as revealed in the above diagram for the year ending June 30, 1908, it will be seen that the decline in income was quite small, and that the decline in dividends did not make its appearance till the year ending in June, 1909, — which corroborates the fact of common knowledge, that the panic of 1907 was chiefly financial in its nature, and its effects were not so important in the world of general commerce as has been the case in other panics and crises.

Unless the tables and diagrams given herein are proved to be false, it is believed the assertion should not be made that the quotations which come upon the tape are merely a string of figures sent out by the market leaders with the intention of deceiving the public. The more the problem is examined, the stronger becomes the conviction, that these leaders are but a part of the vast mechanism of commerce, and that they can only succeed by conforming their operations, in the broad outlines at least, to the legitimate tendencies of the market.

Summary of the Last Two Chapters

N.B.

If trade were really free, if all dealers and producers acted with judgment and discretion, and if the facilities at hand for conducting each business were in all cases perfect; then speculation, as well as any business, would show better results to the community. One of the duties of organized speculation is to fix prices upon a legitimate commercial basis and to provide for their continued adaptation to the movements of trade and industry. It must be confessed that the result is accomplished but indifferently. The reason is principally found in the fact that the similarity of the business to gambling leads into the market all kinds of adventuring traders who have not given serious and

painstaking study to the question of the fluctuations of prices and market movements.

Some of the important movements of prices under organized speculation are due to the trading of the amateurs or unskilled operators just mentioned. The great number of purchases and sales that they make, most of them being based solely on mere whim or caprice, causes an exceedingly erratic market with numerous rapid minor declines and advances. But the professional speculators, many of whom deal in the actual commodities, have sufficient nerve and skill to anticipate the larger reactions and cycles and so to narrow down many of the wider swings of the market and keep it within closer limits.

The natural tendency of speculative markets is toward bullishness; but the advances engineered upon the exchanges are continually cut short by the action of bear speculation and the supply of actual commodities and securities. The speculative prices of commodities and securities seldom fall below their cost of production; but a legitimate price is reached, usually several times during the year, which permits the commodity to pass into consumption and the security to be purchased by careful investors. A market in which speculation is organized consists of a number of advances from the natural consumption or export point and back to that point. This natural tendency toward bullishness in speculation is so important, and the number of speculative deals so largely overshadow the transactions in the commodities for actual use, that, even at harvest-time, when the larger part of a crop is being marketed, there is little more tendency toward decline than at any other period of the year. The charge made against organized speculation that it depresses prices is utterly unfounded; and the most cursory examination would prove the absurdity of the proposition. Those who charge that it advances prices, however, are more logical.

As a price regulator, therefore, organized speculation has

some excellences mixed with serious faults. Organization tends to make any activity more effective; and the principal task accomplished by the speculator, whereby he stops a decline by his purchases and an advance by his sales, is facilitated by giving him the opportunity not only to buy before he sells, but also to sell before he buys. On the other hand, the extreme ease with which a deal may be made upon a speculative exchange and the small capital required are attractive influences upon the unskilled speculators, whose operations cause most of the confusion and erratic fluctuations seen in speculative markets. These amateur speculators, while losing their own money, derange the market, creating tendencies which even the wealthy professional speculators only partially overcome.

CHAPTER IV

INDIRECT EFFECTS

A Continuous Market

Those who trade upon the exchanges are directly subject to the effect upon their fortunes of the prices which are continually being made. But the market which is thus provided is taken advantage of by different persons in the community; and exchange trading has its effect in the most remote and unexpected places.

Commodities and securities in which there is organized speculation are provided during exchange hours with a continuous market, and the difference between successive quotations is not nearly so great as in the unorganized markets. The producer of wheat, for example, may be assured that, if he rejects an offer for his crop, the market will not recede from his reach except by gradual movements which are seldom more than a fraction of a cent at a time. Even if the price should have an extreme decline, there will be abundant opportunity for him to sell his product on the way down.

The market for real estate is unorganized, and is quite different in its workings. The price of land or any other kind of real property may be boomed in the same way as any speculative favorite upon the exchanges. But in real estate, when the advance has spent itself, we find that frequently there will be a sudden change and the property become unsalable. As the saying is, real estate under such circumstances, "cannot be given away."

The reason for this difference is that real estate cannot be made the subject of organized speculation. Each piece of land has its separate characteristics, and a certain formal-

ity in making transfers is necessary; whereas organized speculation, as it exists, requires that the commodity traded in be sufficiently uniform in character so that it can be graded, and that there be no obstacle to facility of transfer.

So highly is a continuous market esteemed by business men that they will even select a commodity for production which is subject to great uncertainties, provided it has the advantage of being traded in upon the speculative exchanges. An illustration of such selection and its effect in determining the industries of a country is commonly seen among the farmers on our Western prairies. The homesteader or new settler, if he be poor or in debt, will frequently put his land into wheat — not in every instance because he thinks that a single crop will pay better than mixed husbandry, but because he believes, as he expresses it, that wheat is a "cash crop." In other words, there is a continuous market for it upon the exchanges, and there is always a demand from speculators, even though the buyers for milling or export may hold off. The local buyer, in the case of a commodity which has a continuous market upon the exchanges, is always ready to make an offer based on the exchange quotations, which appear at all seasons of the year and never show the sudden sweeps in price so often seen in the case of non-speculative commodities. But if the farmer resorts to mixed husbandry, he may, or he may not, find a market for his crops.

In the matter of making loans upon collateral security, the advantage of the continuous market is obvious; for, if the lender be offered a security that he can readily realize upon, he can do business with safety to himself, and he will grant the loan upon favorable terms. It is, therefore, with sound reason that the banks of Chicago have repeatedly signed remonstrances to Congress when anti-option laws were proposed, and have stated in memorials that the present system of lending money upon elevator receipts was an

excellent one, and that dealing in futures upon the board of trade was the best safeguard for the system. The banks of New Orleans also have been equally emphatic in commending the trading in options upon the cotton exchanges as increasing the safety of lending upon warehouse receipts; and the bankers of other cities, including New York, have signed similar memorials indorsing the present system.[1]

As regards stocks and securities, the continuous quotations and liquidity afforded by the exchanges stand at the very foundation of our financial system. Stocks and bonds whose values have been tested by organized speculation are considered excellent collateral for loans, as they always have a value if offered for sale upon the stock exchange. This value renders them of great service in conducting large financial operations, and especially in making payments in international trade. Furthermore, the fact that money can be borrowed upon securities renders it oftentimes unnecessary to sell them even at a time of panic; for the banks are able, if excellent collateral be offered and the panic be not a serious one, to credit loans on their books, thus giving important relief in case of financial strain.

The advantage of an investment which can be quickly turned into money is widely appreciated; and it is the custom of financial institutions, as well as of individuals, to send surplus funds to Wall Street in order that they may be directly or indirectly invested in securities, or loaned upon them. Something can be said upon the other side in this matter, and this preference for the financial markets as a place of temporary investment has been severely criticized by some, as they claim it results in taking capital from local industries and in placing it under the control of the great manipulators of finance. But, in a broader view, the sending of funds to the centres, where they are placed in stock exchange securities, appears as one of the few elastic features of our financial system. Wall Street does not get the

[1] *Cf. Congressional Record,* vol. 23, part 7, p. 6563.

investments of the country except when it offers attractive terms for them. The people want a place to which they can send their surplus funds, drawing interest upon them, and at the same time have good assurance that they can terminate the investment and get their money back whenever they wish it. Under certain conditions, Wall Street is the only place at which this service can be performed for large masses of capital; and, by its help, the banks and financial institutions are placed in such a position that they can do a like service for others. It is not a question of whether our central reserve city banks constitute the best instrumentality for holding the reserves of the smaller banks. Without the market furnished by organized speculation, the terms on which they would hold the reserves of the country banks would not be so favorable as those at present granted.

When the finances of the country are subjected to strain, the ultimate burden comes upon the securities market; and, remembering that it gets little assistance from any quarter, the wonder is that panics are so few. It is the thousands of traders continually buying and selling by means of the facilities afforded by organized speculation, who make the market in which the disquieting results of ill-judged business ventures are finally liquidated.

Panics

Notwithstanding these facts, the stock exchange is accused of producing panics. No doubt the reason for this accusation is, that, in time of financial crisis, it is the place most prominently mentioned. All eyes are turned to it; and, very soon after conditions have been adjusted in Wall Street, outside commerce shows improvement. Yet it is not strange that monetary disturbances should be most noticeable at the financial centre. Commerce and finance are subject to disorder in the same way that all things human are; and, when unsound conditions are disclosed, the institution whose proper function it is to guard the finances

of the country naturally becomes prominent. The stock exchange should not be blamed because it is all activity at such a time and doing its duty in the midst of the disturbance. As well might we say that a hospital is the cause of disease because there are so many sick people within its walls.

The exchange also is unfortunate in regard to some of the financial interests associated with it. For almost indistinguishable from its membership are those who take advantage of its facilities in order to gain indemnity for reckless and dishonest transactions. The broker cannot enter into all the affairs of his client; and, when business is offered him, he accepts it as any one does under similar circumstances, provided there is nothing that appears wrong on its face. Occasionally there will occur wide and sensational fluctuations in the price of a security upon the stock exchange, implying manipulation from some quarter. When such manipulation occurs outside of an exchange, nothing is done or can be done except through the doubtful and tardy expedient of legislative action. Upon the stock exchange, such manipulation is made the subject of inquiry; and, if members of the exchange are the cause of it, they are promptly disciplined. However, it is too often found to be the case that the real cause of the disturbance comes from traders who are not members of the exchange and hence are outside the jurisdiction of its authorities. The financial leaders who cause much of the trouble are often vociferous in attributing the disturbance to the institution that saved them.

Amateurism again

In this connection it becomes important further to examine the question as to whose trading it is that furnishes the enormous number of transactions that go to make up the continuous market. One of the agencies is seen in the fact that the system of organized speculation

brings together all dealers who wish to trade in a particular commodity or security; and hence, in such an assembling of different interests and wishes, there is greater likelihood of finding some one who will accept a particular proposition than in case the different units be more widely separated. The modern commercial world is a large one, and the number of business men is being continually increased. Hence, when those who may wish to buy or sell on particular terms throughout the country are concentrated in a certain place, the volume of transactions may be very large, and a wide range given to the number of propositions which may be made with a good chance of being accepted.

Moreover, it may be said in answer to many writers who carefully calculate the number of times that a commodity is sold and re-sold upon the New York Produce Exchange, for instance, that such repeated dealing is not necessarily illegitimate or of a gambling nature. These writers, to be consistent, should adopt in its entirety the doctrine of socialism, which looks with horror upon gainful trade. However, for those who believe that trading is one of the natural agencies by which commodities are distributed from producer to consumer, a different view may consistently be taken. Furthermore, the fact that a commodity may be handled a number of times upon the floor of the exchanges is matched by the fact that, in the modern process of manufacture, a commodity must be handled a number of times in order to get the benefit of the greatest division of labor. The exact number of times is not the essential thing in either case. It is sufficient if we note that, with division of labor or any specialization of functions, the tendency is for the number of persons engaged to increase; whether it be in production, strictly considered, or in the distributive process as well, or whether it be in a conceivable socialistic state, or in a state where individualism prevails.

Having disabused our minds of the idea that an arithmetical calculation is the best method to pursue in arriving at

a conclusion as to the proper number of times that a commodity be handled or transferred, the other side of the argument should be examined; and we should not blink the fact that the enormous number of deals upon the exchanges is largely made up of the mere adventuring trades of the amateurs led into the market by the gambling spirit.

It is the same with speculation as with any business, — in a broad sense the successful producer who makes money for himself has the best effect as a social factor; nevertheless, in some minor respects, the business community may profit even from disaster. The flotsam and jetsam of commerce may help some persons at the same time that the nation as a whole is made poorer by the wrecking of its valuable fleets.

In the futile struggles of the amateur speculators resulting from their unwise ventures, which are directly and indirectly a tremendous economic loss to the community considered as a whole, we still have the compensating fact that their numerous trades supply most of the volume of the continuous market. There would be a broad market in any case from the mere concentration of a wide area of deals in a particular exchange; but it would not be nearly so broad as the market that now exists, where there is this active participation of the outside element. This is readily seen if we look at the number of transactions in a stock which is the subject of great interest and speculation by the uninformed.

Almost all of the important questions which are to be considered in determining the value of organized speculation centre about the activities of the amateur speculators. Their pathological mental condition must be carefully studied in order to arrive at any correct conclusion. They are especially important in America, as speculation in the organized markets is much more common here than elsewhere. In discussing the results of their activity Professor Emery says: —

"The question must be faced of the effect of eliminating the public from the speculative market even if it could be accomplished. It is sometimes supposed that such a result would be all benefit with no injury. On the contrary, the real and important function of speculation in the field of business can only be performed by a broad and open market. Though no one would defend individual cases of recklessness, or fail to lament the disaster and crime sometimes engendered, the fact remains that a 'purely professional market' is not the kind of market which best fulfills the service of speculation. A broad market with the participation of an intelligent and responsible public is necessary. The writer ventured this opinion some years ago at the cost of considerable criticism. The German experience would, however, seem to bear it out. A narrow professional market is less serviceable to legitimate investment and trade, and much more susceptible of manipulation."[1]

While hesitating to express an opinion contrary to that of an economist who has done pioneer work in a difficult field, thus rendering it easier for those who follow, and while acknowledging in this place his obligation to the work of Professor Emery, the present writer ventures to say that the lack of skill and the recklessness of the amateur speculator should be bluntly stated and unsparingly exposed. The important consequences of his psychological condition should be traced and recognized, since they affect powerfully the value of organized speculation.

Recurring to the excerpt given above, it recognizes, as it should, that the broad market of the exchanges is due in great part to the participation of the public; but, at the same time, the implication is given that it is possible for the public or the mass of unskilled speculators to operate intelligently in the market. The present writer, however, takes the position that the public as such is not competent to engage in any form of business. Every form of produc-

[1] *Cf. Yale Review*, vol. 17, p. 21.

tion or distribution, whether it be of the nature of agriculture, manufacturing, or merchandising, should be undertaken only by specialists in their several lines. The public should not engage in business except as each individual, through division of labor and specialization of functions, operates in a particular field in which he has some aptitude and training.

Among all callings the one to which it is especially difficult for the average person to adapt himself, is that of speculation. There is not one in a thousand, it might almost be said that there is not one in a hundred thousand, who possesses that modicum of good judgment, that level-headedness, that most uncommon form of common sense, which goes to make up the mental equipment of the true speculator. The speculator must have the faculty of looking through all the conditions which affect the determining price-making factor in a particular case. He must be neither an optimist nor a pessimist. If there be any calling which requires that things be seen as they are, without any mental coloring, either to make them appear better or worse, it is that of the speculator. He must be capable of broad synthesis, so that he can properly place the particular commodity that he has in view as forming a part of the whole mass of commodities in price relations; and, at the same time, he must be capable of the most unsparing analysis of the price-making factors which control, or are supposed to control, in any particular field.

If the above view of the speculator be correct, then amateurs have few indeed of the requisite qualifications. It is not denied that they may be eminent in art, music, or even in some form of business which they know; but it is plain that they do not understand speculation, else they would follow it with better success. The best place to study the peculiar attainments and general mental condition of the amateur speculator is in the broker's office. Let the investigator approach one of them in such a place, get acquainted

with him, and draw from him his life story. If he be an old trader, it will usually be found that he was at one time prosperous and that he lost his property as a result of speculation. If he be a beginner, it will in all likelihood appear that he is filled with a confidence in undertaking something that he does not understand which is extremely ridiculous in view of the probability of his failure.

Shifting the conversation, ask your acquaintance what he thinks of the market. Here the absurdity of his position will be even more noticeable. It will be seen that he depends upon gossip and superstition, and that there is little which is rational about his talk. He believes that he has what is called a "tip" from some insider, or that he has been able to ascertain the intentions of the "big men" who are supposed to dictate matters. But more likely than being a victim of tipsters, the adventuring speculator will be revealed as a follower of the most absurd superstitions. He believes that a certain number of days after a particular quotation is made, a certain market movement will take place. He believes that certain days of the week or month are lucky or unlucky; or that if a particular quotation is posted at, say 10.30, it will be an important indication as to the day's fluctuations. Or perhaps the opening range appears to him as the determining influence; and he will carefully watch to see whether the first figure of the range that comes out on the tape is higher or lower than the second one. This fact will be pointed to as an important indication of the movement of prices for days in advance. Any absurdity, even of the most superstitious character, may be found as a part of his mental equipment. That the above description of the ordinary adventuring speculator is true can be ascertained by any one who will take the trouble to become acquainted with him. His activities are the merest attempts of the tyro to do something which he does not understand; and in cases where he has had experience, he learns nothing from it.

Summing up this subdivision of the question: it would appear that by the mere concentration within the walls of an exchange of numerous interests which would otherwise be separated, and by the participation of speculators who know their business, a broad and continuous market is given of great service to all interests. By reason of the volume of trading by amateurs or unskilled speculators, however, the market is made much broader than it otherwise would be; but the good that is thus accomplished is more than offset by the artificial markets and eccentric fluctuations caused by unwise speculative operations. Any good effects of the participation in the markets by amateurs should be availed of as a partial offset to the harm that they do, but the market would be sufficiently broad for all practical purposes without their help. The participation of the unskilled is no more desirable in speculation than it is in any other form of human activity.

Hedging

In hedging, the speculative markets are brought into such relation to the general business community that they perform a function akin to that of insurance; but many persons cannot understand this connection or this process. They say, and say truly, that in the trading in futures there are few deliveries of the actual commodity. If a miller sells wheat for future delivery upon the board and afterwards buys in that wheat, letting the one transaction check off against the other, these critics of organized speculation point triumphantly to the fact that in this transaction there has been no delivery of actual wheat. Yet the miller in making the deal may not be speculating. He may in reality be taking advantage of the fact that others are doing the speculating for him and performing a service similar in its essentials to the service which an insurance company undertakes for its policy holders.

For instance, the miller, at the time when the farmer

brings his crop to market, may be offered an abundance of wheat of the grades which it would be practicable for him to use in milling for his trade, and at such a price that he could use it with profit. But the process of milling is not an instantaneous one, and wheat and flour both fluctuate rapidly in value. Long before he has his year's supply of wheat milled, there may have been the widest fluctuations in the market for flour. It might, for instance, decline heavily to such a price that there would be no profit in further milling. Under the system of specialization whereby the speculator runs the risk of changes in price, the miller has that particular department of his business taken in hand by another; and he is thus able to specialize more completely in operating his mill and marketing his product. The manner in which this is done is as follows: —

Let us suppose that the miller had laid in a supply of 100,000 bushels of wheat for a year's milling. He then sells the same amount of wheat for future delivery in Chicago. When he does this, he has in mind the fact that cash wheat, future wheat, and flour all sympathize with one another in price, and may be depended upon, with few exceptions, to move together. Hence, should the price of flour and wheat decline, in all probability the price of futures would decline also; and the miller will close out his wheat futures, the profit in them compensating for his losses owing to the decline in the value of flour. This he does as the season progresses, gradually closing his short wheat as he sells his flour, thus keeping short of futures to about the amount of his stock of wheat and flour.

A miller who has hedged in this way may be quite indifferent to the fluctuations of the market. He has not eliminated all of his business risks, but he has almost completely eliminated those risks which come from changes in price. Yet he is manufacturing and holding commodities whose values are most uncertain, operations which might otherwise subject him to losses such as he could ill afford to bear.

This process is a little different from insurance in other forms of business, but the principle of it is the same. It is the transfer of risks by specialization in exercising business functions, and helps to cut down costs as truly as any method of systematizing production. The illustration given above is only one form of hedging; but the principle is of wide applicability and subject to almost infinite variation. Again considering the case of the miller, he has, let us say, the opportunity to enter into an advantageous contract whereby he may bind himself to deliver a quantity of flour at different times in the future. But he does not at present own the wheat necessary, and has not sufficient facilities for storing it if he should buy it at present prices. By using the markets furnished by organized speculation as a hedge, he may have his margin of profit in the operation of milling guaranteed to him. The manner in which he does this is very simple. He buys wheat for future delivery upon the board of trade to an amount sufficient to make the flour that he has contracted to deliver. Then he buys actual wheat by sample of the quality that he wishes or of different grades, so that he may mix and grind to advantage. But at the same time that he buys the wheat for actual milling, he sells an equivalent amount of his future wheat. Hence, if the price of spot wheat should so advance that his profit on milling were cut down, the profit on the futures that he previously bought, and is now continually selling, would make his losses good.

It is to be noted in the illustration given that the miller is not insisting upon delivery of the actual wheat due him on his futures. He could so demand it and such demands are often made; but there is this objection to his pursuing that course. The wheat that he would receive on delivery might not be the best grade or grades for the particular purpose in hand. Then it may be that he was hedging in Chicago or Minneapolis, while his mill was located at, say, Winona or Fargo. In such case it would usually be more

advantageous to buy the wheat of local farmers or grain dealers and use his futures upon the exchange merely as an insurance policy, simply as a device for guaranteeing profits upon his contract to deliver flour.

The method of hedging explained above is by no means confined to the flour miller. The cotton spinner hedges according to precisely the same principle; and those who manufacture corn and oats into different products also resort to it. In short, any manufacturer, whose raw material is of such uncertain value that it is traded in according to the future system on the exchanges, may use it.

The exporter or dealer in a speculative commodity hedges in a similar manner. The local buyer will be informed by telegraph as to the price for futures of his commodity, and, after buying of the producer at a price so fixed, with due allowance for transportation, he hedges by making a sale for future delivery upon the exchange. This reduces the buying of the commodity to almost an exact science, and gives to the merchant the ordinary profits that go to the dealer, relieving him at the same time of important risks which he would be obliged to bear if he were not insured against fluctuations of price in the world market. Elevator companies and buyers of commodities send out bids based on the price for futures, while exporters and foreign buyers cable bids based on the same source of information.

Warehousemen and owners of elevators use a similar system. An elevator, for example, may not have received from holders of wheat a sufficient quantity of the cereal to fill it. The owner in that case has a method by which he can fill his elevator and so earn storage charges. He proceeds first to buy wheat from farmers and others, incidentally, be it noted, bidding up the price when wheat is coming to market. But elevator companies are not well adapted to enter into the business of speculating in wheat, and their owners do not wish to run the risks of fluctuations

in price. To be a dealer in wheat in that way — to buy a stock of it and sell it at the time when it is thought most advantageous — is quite different from merchandising in commodities of more stable value. Hence the elevator owner takes advantage of the facilities furnished by organized speculation. He finds upon the speculative exchanges traders who are willing to run these risks for him just as he finds, in the offices of insurance companies, persons who are equipped to run the risks of fire, or storm, or death. In hedging against price fluctuations, however, it is not an insurance policy that is used, but a contract for the future delivery of a commodity. When, for instance, there is a large quantity of wheat in store, the more distant option sells at a higher figure than the cash commodity. This difference constitutes the cost of carrying the wheat till the future date. Thus by selling according to the future system and delivering the wheat when the option matures, the elevator earns storage charges, and incidentally is one of the best customers which the farmer has for his product at the time he is bringing it to market.

The above are but a few illustrations of the manner in which speculative futures can be used in different parts of the process of handling and manufacturing commodities. It makes no difference what the commodity is; the business principle in hedging is the same, provided only that there be a speculative exchange on which the deals may be made.

But the word "hedge," used in this connection, is not in all cases restricted to the idea that a business man has protected himself in such a way that his hedging deal will necessarily fluctuate in exactly the same manner as his original deal. Indeed, a business man may hedge on any form of business venture by going into a transaction of a different nature, trusting that both ventures, by the law of chance, will not go against him at once. Inasmuch as the

speculative exchange furnishes the only continuous market in which a commodity or security can be sold at any time, it is the ideal place for hedging; and it is the only place in which a business man who fears some form of disaster can so hedge, without disposing of his particular investment, that in all human probability he may save a part at least of his profits in case his direct business interests are unfortunate.

For example, let us suppose a manufacturer engaged in some form of iron or steel business. His interests are not exactly identical with those of the United States Steel Corporation, but they are approximately so. When general business is excellent, all the iron-working plants in the country are put in service, and profits are good both for large and small companies. But when business declines, some of the more poorly equipped plants pass out of service, and those that continue are by no means making the profits that they usually do. The shares of the United States Steel Corporation reflect in their price the vicissitudes of the steel and iron trade. But the small foundryman, who has perhaps recently improved his plant, possibly on borrowed capital, will feel the need of some form of hedge whereby he can insure himself against adverse general trade conditions. He needs insurance against a general decline in business even more than he needs fire insurance; and this is particularly important at a time of great business prosperity and activity. At such a time the shares of the United States Steel Corporation are likely to sell at a higher price than they do in times of panic; and the foundryman, in the case supposed, might well hedge by selling short a moderate number of the shares of the corporation. If business should continue good, he could make enough profit to get his house out of debt and to re-margin his short sale of steel corporation stock; and, by waiting till some period of business depression sets in, he could cover his short sale at a profit. On the other hand, if the business decline set in soon

after he had made the short sale, this hedge would furnish perhaps the only reliance to save him from bankruptcy and ruin.

In every form of business there is some kind of stock which can be sold as a hedge to guard against a general depression in trade. The owner of a railroad can sell the stock of other railroads; or the farmer can with advantage sell the stock of a railroad which serves his section of the country, because, if crops in his vicinity are poor, the local railroad will have small earnings and its stock will decline. In the case of a business for which there seems to be no particular stock which it is especially appropriate to sell, a stock which in some degree represents the general business of the country, such as that of the United States Steel Corporation, would be an excellent hedge.

There is risk in every form of business, especially in one that is being conducted with small capital; and it is to be regretted that the knowledge of how the stock exchange can be utilized in insuring against business disaster is not more widely diffused. At present it is only the large business houses that are in sufficient touch with Wall Street to take advantage of this form of hedging. However, there are many business houses, both large and small, that see the wisdom of holding bonds which are salable on the stock exchange, and on which money can be borrowed with facility. Gilt-edged bonds do not have great declines in price during panics; hence they are an excellent hedge and form the safest kind of a reserve against disaster.

A business man who has such a reserve in the shape of bonds is in an enviable position, for he has always the continuous market furnished by organized speculation on which to dispose of them; and, if panic comes, he has excellent collateral on which to borrow money. So at perilous times, when the banker informs the business man, not so well provided, that it would be best for him to reduce his line of credit, the business man, with good investment

securities in his tin box, can furnish collateral and so increase his line, instead of being obliged to diminish it.

The value of a business reserve in the form of securities is further increased by recent legislation which allows banks to issue notes on other than government bonds. Such a reserve is better than one invested in real estate; for some forms of real estate are considered by bankers merely as an additional burden upon a borrower, making him even less able to fulfill his obligations. It is better than to have it loaned; for, in case of such a panic as that of 1907, the best debtors may fail to keep agreements.

In order to show the wide field of possible usefulness of the markets furnished by organized speculation, let us return to the farmer and suppose him prosperous with a granary full of wheat. He is not obliged to sell his wheat at this time, because he has sold other crops and has enough funds for his use. But he has his granary which has been built at considerable expense and must be used in order to get the benefit of his investment. There is a way in which he can, with his little granary, go into the warehousing business as a hedge upon his other investments, and with as great safety as the large elevators in the city. If he will look at the market quotations he will see December wheat selling at, say $1, and wheat for May delivery selling at, say $1.06. This difference of six cents represents the cost of carrying the wheat from December to May. It is the custom of the elevator owners to fill their warehouses with cash wheat and then sell against it for future delivery, thus making the carrying charge as above explained; and our small farmer can operate on exactly the same plan and with equal chances of success. In the case supposed he could sell the contents of his granary for six cents more per bushel for May than for December delivery. Hence he has but to sell for May delivery upon the exchanges; and, when that month arrives, he finds that he has secured a profit equal to that which he would have got in December plus the six

cents carrying charge as just stated. The above instance is not speculation. It is a case in which the farmer is enabled, by utilizing the exchange markets, to go into the warehousing business and thus make a hedging investment against his more risky business of farming.

No attempt will be made here to multiply instances of the manner in which hedging can be used in the general field of business. To do the subject complete justice would of itself require a lengthy essay, but enough has been given to show the wide range in which hedging operations can be conducted. To enter into the subject in detail, examining every industry separately, and then to point out in each case the manner in which the speculative markets can be used to make regular and approximately certain the business interests of those who do not wish to take risks, is one of the most hopeful means of improving the condition of the people, and especially of building up the body of independent business men and furnishing a means whereby they may compete on equal terms with the large corporations and business houses.

The task just outlined would be a crowning one, and would be important in the development of the process of specialization of functions, for it would be the setting-off of the risk takers so that those who are not in a position to take risks could throw them upon the shoulders of those who are willing. The speculative exchanges are delicate mechanisms whose use is but just beginning to be understood. They are great conserving forces and instrumentalities for good. All that is needed is to understand them, to acquire the skill of using them; and hence to avoid the misfortunes of those who, instead of properly using, actually attempt to play with edged tools.

The World Market

The question of prices is involved in much complexity, and it is difficult to express one's self in such a way as not to

be misunderstood. For instance, it is perhaps necessary to explain that, when a price tendency which affects the value of a commodity in a particular place is mentioned, it is not intended to imply that the commodity might not have a value in the world's market of which its local value is merely a variation. Thus it is that the local value of a commodity is said to be the same as the world value with proper allowance for cost of carriage.

A commodity which is produced and consumed throughout the world and is the subject of international trade has, roughly speaking, two values: — its world value and its local value. And, roughly speaking, its price in the two markets is determined by quite different classes of persons: — the local traders and the world traders. As a result of that peculiar jealousy in human nature which accounts for the fact that a man is always saying that his own trade and that of his class or of his immediate business associates is most important, and that those who exercise other trades are exploiters, or at least non-producers, we find the feeling of opposition among farmers, for instance, against city dealers. The agriculturalist, instead of welcoming the action of the man who receives his crop and distributes it for consumption, appears to consider it a kind of desecration for any one to trade in his product after it passes out of the hands of the local dealer. Yet both kinds of price-makers are necessary — the makers of world prices to consider the general demand and supply, and the local dealer and producer to agree on such deductions and allowances as are proper to account for the cost of transportation or other factors which make local prices diverge from world prices.

The local dealer is no more fitted to determine the world's market than the student of broad conditions of supply and demand is fitted to understand the state of trade in a particular locality. Under present conditions the specialization is accomplished by concentrating those who consider broad price tendencies in the exchanges, a par-

ticular city representing a wide area and there being comparatively few exchanges throughout the world.

The tendency of those whose business consists principally of local affairs is toward provincialism. This narrowness is often criticized, and with good reason. Yet it is necessary that there be those who bring prices into touch with local conditions, even if the immediate elements of value be exaggerated; and the specialist on local prices may be pardoned if he sometimes attaches too much importance to the particular facts within his knowledge.

The leaders of the exchange market, however, are imbued with exactly the opposite tendency. Their function is that of determining world prices; and, in the broadness of their vision, they pay perhaps too much attention to those factors which are remote. The whole machinery and apparatus of a speculative exchange is constructed in such a way as to fix attention on the world market. News is gathered from everywhere for the especial assistance of exchange traders, and far-fetched conclusions derived from foreign dispatches are perhaps given greater weight than should be assigned them. The quotations of other markets are continually being posted, and the tendency to bring together the prices fixed on the different exchanges by the agency of arbitragers is highly important. The result is the modern world market, in which the prices fixed by the free interchange of communication give the fullest effect to all the diverse elements of value.

Admitting, then, that the makers of local prices and of world prices are neither of them perfect, and that each class attaches too much importance to its particular share in the price-making process, yet, in the broad field of commerce, each is specializing in the manner most to be desired. The two kinds of dealers require each a different training; and it is one of the important factors in the value of organized speculation that it furnishes the machinery whereby this specialization is effected, the speculative

exchanges representing a world market to which all local prices can readily be conformed.

The Directive Function [1]

It is possible to imagine a community (although of course it would be a savage one) in which commodities would have no exchange value, but it would be almost impossible even to conceive of a state in which there is any civilization unless there be some kind of an arrangement for making prices. Even socialist writers, in describing their ideal, talk glibly of labor checks as a measure of value. In our competitive system, furthermore, the question of price is especially important. Prices effect the transfer of labor and capital from one enterprise to another. For example, if the price of wheat fall, agriculturalists are not likely to sow as much of that cereal as formerly; and some of them might, in such case, abandon agriculture altogether, seeking other and more lucrative fields of activity. Prices, too, determine the flow of commodities from one city or country to another; and, like a ship obeying its rudder, so the mass of business transactions follow the lead of the makers of prices in the world's markets.

In fixing the price of commodities, it is important to determine, not only the present price, but to make some estimate, if possible, in regard to future prices. The nation must be forehanded; and not consume an entire crop till a subsequent crop has been assured. The advantage, then, as a means of directing business enterprises, of an estimate made by experts of future prices is readily seen. In regard to the prices of speculative commodities, there is such an estimate, backed in the best manner possible by actual transactions of the large business interests. The prices of speculative commodities and securities as fixed upon the

[1] *Cf.* Emery, *Speculation on Stock and Produce Exchanges in the United States*, p. 143 *et seq.;* Conant, *Principles of Money and Banking*, book VI, chaps. II and III.

exchanges are published in the newspapers and considered by all persons in the trade. It is necessary, as above explained, to make certain deductions and additions in order to estimate what the present price of a commodity may be at a certain place. The future price of commodities at the great centres of commerce is the important thing to consider; and, that being established, the price which should obtain at a particular time and place is readily calculated.

Thus it is that the specialization of functions becomes more and more complete; and the manufacturer, the producer, and the small dealer are not obliged to consider the broad movements of commerce which determine the world's price for a particular commodity. It remains only for them to haggle about the grades and other conditions of the transaction upon the basis of prices fixed upon the speculative exchanges.

The Directive Influence of the Securities Market

In the market for stocks and securities, this directive influence is even more pronounced than on the commodity exchanges, but the manner in which it is manifested is different. In stocks the important consideration is the income that is yielded, and particularly the prospects for the continuance of that income, or the possible increase of it.

There are experts who are always examining the earning power of properties as shown by their reports and their physical condition, and basing their purchases and sales on the results of such examination. A stock which has good prospects of paying a six per cent dividend does not often decline below par. And when a stock, hitherto considered good, sells off rapidly in the absence of generally unfavorable financial conditions, we may well look for some cause of deterioration, not readily apparent, which will account for the decline.

Hence, notwithstanding the frequent fluctuations and other ill-effects of speculation previously noted, the prices

fixed upon the exchanges in their broad outlines are an excellent expression of the values of securities considered on the basis of their earning power and prospects. If we are impressed with the fact that the fluctuations of the stocks are eccentric, we should remember that speculative favorites are naturally the shares in companies concerning the value of which there is some doubt. As soon as the more important uncertainties in the value of a property are got rid of, the stock rises in price, is taken off the market for active speculation, and becomes a solid investment.

This process is not perfect; and while a stock is thus undergoing digestion and assimilation, there may be manipulations, contests for control, and even insolvency or the appointment of a receiver. These unfortunate incidents are likely to occur during the early stages of a stock's career. But after its status has become established, and the adventurers whose enterprise has been useful in promoting new industries have left it to conservative management, the speculators upon the exchanges recognize the importance of the progress that is being made. For, long before conservative investors are willing to act, the speculators, by the prices that they make, indicate the proper value of the property; and later, after that value has been generally recognized, the stock is absorbed by investors.

The good effects of organized speculation are best seen after it has had a chance to accomplish its work. It is the same with any function of any member of civilized society. Thus the labor of the builder does not appear to best advantage while the building is in the topsy-turvy condition of being constructed. But wait till it is completed; then we may see the best effect of his work.

Not only does Wall Street make useful indications and predictions in regard to the proper price of a particular security, but in regard to groups, the same excellent effects are noticed. For instance, if prospects for crops be poor in the farming section of the country, this fact will be

reflected in the prices of the stocks of the granger railroads long before there are any tangible effects upon business conditions in the agricultural regions.

General Business Predictions

As regards general business conditions, the manner in which the average prices for stocks foretell the same is remarkable for its success. The speculative fraternity of Wall Street has long sought for some barometer that would foretell prices, but it has not succeeded in finding any single indication of the fluctuations of stocks which would accomplish the purpose in view. The reason is because stock prices are so early to move in a business advance or decline. It is like gilding refined gold to use a barometer to indicate in advance the next movement of a barometer.

The larger interests in finance and those best capable of judging the condition of the country usually have considerable investments in stock companies. Not only do important merchants and manufacturers have their holdings in the form of stocks, in the business which they manage, but many are wise enough to have a reserve fund which they can fall back upon, also in the form of securities that can be sold upon the speculative exchanges. Being in a position where they can see in advance of others the first tendency toward retrogression, they are likely, in case conditions are unfavorable, to provide themselves with funds by throwing some of their securities upon the market; and, while perhaps talking prosperity to keep up courage, they will thus unwillingly but actually initiate a decline. In the same way before a betterment of business conditions, these captains of industry and finance will see the elements of business improvement and increase their holdings of stocks.

The successful speculators, too, from their close acquaintance with large business men and their study of statistics of banks, railroads, and other underlying conditions, will, in their operations, make such trades that they influence

the course of commerce and assist in initiating those larger market movements which begin before the corresponding upward and downward swells of general business.

For these reasons the speculative markets have a specially directive influence upon commerce and furnish a prophecy in regard to the future course of general business. If the commercial and industrial classes would follow the lead of the stock market in making their commitments, they would have an almost unfailing guide. Thus, in 1907, we had what is called a rich man's panic occurring in the early part of that year. Stocks were thrown upon the market by those who were able to gauge correctly future conditions, and hence the tremendous decline. But general business was not affected at that date. It was not until the panic in November that the country awoke to the fact that there were some unsound business conditions.

Beginning at that time, we had a somewhat depressed condition in general business which lasted for over a year. Those small traders who before were so buoyant had now become pessimistic, and were anxiously restricting their business commitments and selling at reduced prices the commodities and securities that they had previously bought at high prices. Only those who looked to Wall Street, or to the same facts that determined Wall Street's course, were advantageously guided in their business interests.

For the stock exchange at this time had got over its pessimism and saw light ahead. A boom in stocks was in progress, and, while the remainder of the country was liquidating, the Wall Street markets were advancing. Later the directive influence of the great business men as reflected in Wall Street was felt upon the country, and there was good business in 1909. But early in 1910 we find the culmination of the upward movement in stocks followed by a decline in business which was led by Wall Street liquidation and sagging markets.

There are other guides that furnish an indication of the

course of general business, but none of them are comparable to the indication afforded by the course of the security markets. We can study, for instance, the proportion between the loans and deposits at the banks, the lending rates of money, the bank clearings, the imports and exports, or the fluctuations in the prices of commodities; and we shall find that these and other statistics often throw light on future business conditions. But such statistics can only be used with the greatest discrimination, and the most glaring errors are made in interpreting them even by experts. Whenever a business man attempts to predict the course of trade by means of these statistics, and especially when he merely selects a few of them for examination and study, he renders himself liable to make the greatest mistakes. It would be much better for him to let the leaders of finance direct commerce, and confine his operations to making his own business follow their lead, as shown by the broad movements of stocks and bonds upon the organized markets.

Some Exceptions considered

It is just as much in accord with the natural order of things that Wall Street should direct the commerce of the country as it is that the farmer should grow crops. But the farmer does not always grow crops well; he sometimes makes a very bad mess of it. So also does Wall Street in its particular line. For instance, the Street may lull the financial world into a feeling of false security, or at other times it may give alarm of dangers which are not really impending; or a panic may appear by reason of quarrels between controlling interests as opposed to natural tendencies of general business.

The panic of 1901 is a case in point, for it had little if any effect upon the general business of the country. All of the active stocks upon the list, with the exception of Northern Pacific, fell rapidly, and as quickly recovered. So rapid was the recovery that no one need have been deceived. Its

temporary character was also made apparent from the facts of its origin and accompanying circumstances, as narrated in the financial reviews at the time.

One of the most interesting features of this directive influence is that Wall Street exercises this function in spite of itself. It may be quite contrary to the wishes of the controlling interests that there should be a general business or speculative decline. Yet, if retrogression must come, each interest seeks to let go of its stocks before others; hence the decline is all the more suggestive, and the better indication of what those in a position to know are actually doing.

Talk is cheap, and those who express opinions are often misled into making false estimates of values, but when the talk is backed by actual investment, it furnishes a good indication. By means of the speculative markets, the investments of the controlling interests of industry are bruited to the world and serve excellently well to furnish an indication which it can adopt. The business community upon the outside does not realize the excellence of the stock market as a barometer of general business conditions, but, perhaps because these predictions are true, and evil as often as good, they are regarded with suspicion.

Thus the prophecies of prosperity made by the stock exchange are willingly believed and are greatly exaggerated, as they are assisted by the naturally bullish tendencies of the people and the self-interest of brokers and manipulators. But the prophecies for evil, in accordance with well-known traits of human nature, are not received with favor; and the people are even inclined, when the evil prophesied does take place, to visit their resulting wrath on the prophet. Like a Cassandra with the gift of prophecy, the stock exchange finds that its doleful predictions are not believed; and the people suffer because they will not follow the institution best fitted to direct their commercial activities.

A Reduction in Costs

Risks are inherent in nature, and must be reckoned with in computing costs in productive and commercial enterprises. In order to carry our risks as cheaply as possible, it is of advantage that the risk-takers should specialize and compete with one another. Further, they should be so organized and have such intimate relations to other business men that their activities form a part of, and work in harmony with, the general productive process.

Applying these principles to the organized markets, we find, in the first place, that the enormous number of purely speculative deals adds to the amount of business done in the exchanges. Hence, in accordance with a well-known economic law, the brokers, being assured of a good income from commissions on purely speculative business, find themselves in a position such that they can handle the trade in actual commodities at a small cost and furnish excellent facilities and conveniences. This is true, when we consider commodities such as wheat, pork, and the like; and the same principle also applies in regard to securities. The commissions charged upon the speculative exchange seem infinitesimal when compared with brokers' commissions in real estate or outside commodities.

The effect of any insurance is to save cost. The small dealer in many different lines of trade has a stronger position and can compete with the large dealer to better advantage than is commonly supposed; but he is handicapped in that he cannot afford to run risks which may at any time sweep away all of his small capital. The services and capital of these small dealers are utilized by any system of insurance which will enable them to run the necessary risks; and thus the general public has the benefit of that much additional labor and capital competing in the productive process.

By the system of organized speculation certain risks are

assumed by the speculators, as they make a market in which any one may trade, either in commodities or securities. Hedging is one of the ways in which the benefits of this market are communicated to outside commerce. But something beside the direct effect of hedging is experienced as a result of organized speculation. The producer is insured against fluctuations in the price of particular commodities which are notoriously unstable in value; and hence is enabled to work at close range and devote himself to the practical details of the business, leaving to others the important risks of price fluctuations. By this division of labor and of functions, he is enabled to handle commodities at a very small cost, and so to reduce prices to the consumer.[1]

The fact that there are those in the trade who wish to be given the opportunity to run these risks proves that there is profit in it, the compensation for running them entering into the price paid by the consumer of the finished product. The large interests, having a partial monopoly, could, in many cases, handle the risks cheaper than any one outside the speculative exchanges; and, if they could get rid of the competition of the exchange risk-takers, they could add this risk-taking function as a department to their business. The reason, therefore, that they seek to do this is the same reason that moves a large company with abundant capital, or in affiliation with promoters who know where they can get large capital, to enter any field that promises profit of itself, and which at the same time helps to give complete control of the market for its particular specialty.

The competition of the risk-takers upon the exchanges is most effective; for the service that is offered can be conceived of, not merely as a by-product in the ordinary sense, but something that is produced in such quantities that

[1] It is true that many traders take advantage of the fact that speculative markets exist, and use them to make their gambling deals in. That aspect of the case, however, belongs to the other side of the ledger and is treated of in the chapter on "Moral and Social Value."

there is anxiety to get rid of it. For the unskilled speculators are seeking to run risks, not from true businesslike consideration of possible costs and income, but from false hopes, and because the mere excitement of running risks gives them pleasure that otherwise would come from gambling games in which the hazards are purposely created. Elsewhere the question will be discussed as to whether, from a moral point of view, advantage should be taken of the gambling propensities of the traders. For the present it is sufficient to say that the willingness of the gambling traders to take these risks exists as a psychological fact, and forms a part of the machinery of the speculative exchange. The result is that ventures are taken with slight cost, and, in many cases, with no cost, to the consumer.

Another circumstance that reduces the cost of taking risk upon the exchanges is that one party, in hedging against possible risk, may be the unconscious instrument whereby another party upon the opposite side of the market is also hedging. As an illustration, let us suppose a miller who has made a contract to deliver a given quantity of flour at a certain time. In order that he may fulfill his contract without bearing the risk of fluctuations in the price of his raw material, he buys wheat futures as a hedge until the time when he is ready to purchase the actual wheat of the grade that he wishes for milling. At the same time an exporter has bought wheat for shipment abroad. To insure himself against a decline in the world value while the wheat is in transit, he desires to sell futures as a hedge. Thus it is seen that the exporter has but to sell a short contract, and the miller to buy the same, in order that both parties may be hedged. Even under present conditions with the enormous number of purely speculative deals in the market, it is doubtless true that trades, such as that just suggested, frequently take place. One business man by buying futures as a hedge will be giving the very opportunity needed for another business man to hedge by selling futures, both

sides of the deal being accomplished without the direct intervention of the speculator. But it is the market furnished by organized speculation, and made continuous through repeated buying and selling by speculators, which gives the facilities whereby dealings of the different classes of business men are utilized in many cases to hedge one another.

It would be impossible to prove by statistics that the action of the speculative markets, as above explained, is to save costs, for the reason that those who conduct a particular business do not confide to the public, or to officials, or even to business associates, the exact profits that they make, or their various costs. Different methods of bookkeeping show divergent results in regard to these matters, and even the head of a business may not fully understand the balance-sheet or the manner in which the accounting is done. Nevertheless, some well-known instances will be called to mind in which the opinion of those in a position to know has been expressed either by their acts or their utterances.

The recent discussion of the increased cost of living throws many side lights upon the question in hand. If the whole subject were not such a serious one, the numerous changes of fortune which have befallen the different parties to the controversy might cause some amusement. About fifteen or twenty years ago, the farmer was the one who complained the loudest, and, whatever the cause, the prices of his products at that time were most inadequate. At present the situation is exactly reversed; and the agriculturalist for several years has gathered excellent crops and received a good price for them, while the city worker is wont to complain of the high cost of living. Fifteen years ago the party which felt most aggrieved was saying that the price of agricultural products had gone down without commensurate decline in salaries and debts; while at present the party which has the public ear is protesting that

wages have not risen in proportion to the price of food. To this latter the farmer rejoins that, so far as the advance is concerned, he does not get the benefit of it, since the price paid the farmer for his cattle, for instance, is not high enough in proportion to the price at which dressed beef is selling.

It will thus be seen that there are three parties to the controversy — the producer of the raw agricultural products, the consumer, and the manufacturer; while those who wish to be popular hardly know what position to take in the matter. Referring again to the question of the profits of those who manufacture meat products, the impression became so widespread some years ago that their profits and the consequent cost to the consumers were high that an investigation was directed by Congress. From the report, which was made by Commissioner of Corporations Garfield, it would appear that the profits of the packers were not excessively high. However, it may be said, in passing, that many still cling to the idea that there is something abnormal in the margin between the price paid for the raw material in the meat industry and the price of the completed product. It would carry this essay too far afield if an attempt were made here to discuss the profits of the packers or others, and hence the report of Mr. Garfield will be assumed to be correct. But there is no one who contends that these profits are especially low or that they have suffered any material decline since the introduction of organized speculation. The significant fact, therefore, is, that in this business, which pays at least as high as the average profits, the raw material — the hogs, cattle, sheep, and other live stock that the parties buy — are not dealt in according to the future system upon the speculative exchanges. On the other hand, many of the finished products, such as pork, lard, and short ribs, are so dealt in. But if the contention of the writer be correct, that the markets of the speculative exchanges tend to raise prices part

of the time, then is seen the importance of the fact that the packers buy outside the speculative exchanges and sell in an exchange market.

In contrast to the business of the packers, let us consider the wheat milling industry. In this business, the raw material is the subject of active speculation upon the exchanges, while the completed product is not. It would appear in regard to this business that, while it has expanded with the growth of the country and the prosperity of the millers, the system of trading in futures upon the exchanges has adversely affected it, and that the profits of the business are not so great as formerly. In a hearing before a Congressional committee, Mr. Pillsbury said: —

"The universal rule used to be that the miller generally accumulated wheat, say when the farmers were putting in their surplus rapidly. The universal rule, almost, used to be that you could buy the wheat cheaper at that time than at any other time, and you could make a fairer profit on the actual holding of the wheat than you could at such times when these movements of the farmers were less . . .

"The miller before could generally use his good judgment and make money by the rise of wheat. I would state a fact, which perhaps would be a surprise to most of your committee, that I have no doubt the milling interests in this country, taken as a whole, in the last ten years have paid the farmer more money for wheat than they have gotten out of him. That is the fact through the Northwest. I think I can count on the fingers of my two hands the one hundred and fifty milling firms, say ten years ago, in our part of the world, and I think that is true all over the country, that there are only a few millers who, by using the highest triumphs of milling and the best executive ability and producing the best brand of flour, have been able to make anything. The immense competition and capacity of the mills of this country has doubled three times the amount of flour they can make and it is [*sic*] got right down

the last few years to the question of the survival of the fittest; but there was a time when they could always run on a profit, years ago, by buying wheat in the fall, say on an average at $1 a bushel, and we were almost sure to make a good profit by carrying it until the time when the state of the roads, etc., prevented the deliveries being so large. I look on short selling as being the greatest impediment on the profit of the milling business in that way."[1]

Considering this testimony, the fact is called to mind that most profits have been reduced in recent years, and no one wishes the milling business to be placed on a less profitable basis than other forms of industry which have no special advantage. Yet, when it is remembered that the speculative exchanges have not been imposed upon the country at the behest of any arbitrary power, but have grown up by voluntary association as a natural development, it may be questioned whether the particular industries that they affect should be freed from their action any more than from that of any other factor.

The effect of the speculative exchanges, or of any factor, upon profits in any line, may eliminate some form of surplus that might otherwise have developed. But it cannot make the profits of a business so small that capital will be diverted from it to some more lucrative field and the population of the country be reduced to the necessity of eating whole wheat in its unmilled condition. Every one knows, however, that the milling business is one of the prosperous and expanding industries of the country. Hence in this department of the world of commerce, the speculative exchanges appear as regulators of costs and profits; and we find them directing a particular trade so nicely that the profits of the manufacturer have been reduced, with a corresponding reduction of the price of the finished product to the consumer; and yet the business itself has not

[1] *Testimony before the Committee on Agriculture*, House of Representatives, 1st Sess., 52d Congress, p. 193.

suffered any diminution of output, but has gone on expanding, developing, and serving the public.

From the very nature of things, as shown above, the speculative exchanges tend to cut down costs. As a result of their activities, the purely speculative business gives a good income to the commission man, and the handling of the actual commodities appears in the similitude of a by-product, and hence is done very cheaply. All forms of insurance save cost, and hedging upon the exchanges is very similar to insurance. By thus rendering it safe for a numerous class of dealers of moderate capital to enter the field, much capital is utilized that would not otherwise be available. Furthermore, many of the risks are run, not because the speculators have good reason to expect commensurate profits, but because of the love of excitement and the gambler's illusive hope of gain. Hence, in the case of a large part of the risks, the risk-takers get no compensation for taking them. Finally, the risks are eliminated by the special action of a free competitive market which serves strongly to counteract the tendency toward monopoly in large business houses, especially in those cases in which the raw product is kept at the highest possible price by speculation upon the exchanges, and the completed product is sold in a market in which there is little organized speculation.

The Husbanding of Resources

Among the complementary advantages of greater stability in prices afforded by speculation is that of the husbanding of resources. The necessity for an intelligent and reasoning demand for a commodity need not be enlarged upon. Such a demand should, of course, consider future wants and supplies as well as present conditions. In the case of perishable articles the demand is limited to a particular time; and calculations which determine their price are hastily and roughly made. But with a market of the breadth and

scope of the wheat market, a coördinating force is highly advantageous to provide among other things that a supply be kept over from the fat years for use during the lean years.

Acting from his own selfish motives, and yet for the good of the community, the speculator notes the probability of crop failure in the midst of present abundance, and his purchases tend to put up the price at such a time. But the rise in price diminishes consumption to some extent, with the result that a part of the supply is husbanded till a time when it is more sorely needed. The purposes just mentioned can be accomplished to a greater or less degree by any form of speculation, but through organization this function is perfected and better facilities are afforded. Here, as in other instances, the effects of speculation are not always what are to be wished, as the high prices brought about by it often attract a larger reserve than is necessary. However, it is better that reserves should be larger than necessary than that they should be too small, and any error in this respect is almost certain to be on the side of safety.

Publicity

The peculiar kind of organization effected by our exchanges is a model in its way. It is an organization where each of the units combined is free to act independently, and which does not hinder, but facilitates competition. In this respect it is quite different from other kinds of commercial organizations, which, whatever their good qualities, tend to stifle the individual. Further, the organization accomplished by the exchanges gives free play to the expression of opinion by any trader and the widest publicity to all statistics and facts bearing upon the speculative markets. All transactions in the pit must on the face of them be open and aboveboard. Any member may see and hear the transactions made; and the ticker service, provided by organized speculation, is not intended to keep the terms of

a transaction secret, but to spread them in every direction; the quotations, as fast as made, are given to telegraphers who send them to the thousands who take the service; and newspapers are given every facility to print the quotations. Except in the case of bucket shops and a few rivals, each exchange wishes to get its quotations before the people as widely as possible on account of self-interest, if for no other reason.

The gathering of news, which is furthered by the exchanges, is also of great assistance in spreading intelligence of price-making factors. There are those who advocate publicity as a remedy for any evils that might appear in the development of corporations and of the trusts. Such persons, if they wish to see the actual working of their remedy, do not need to go any farther than the speculative exchanges. Transactions openly made are ingrained in the very nature of the exchange idea; and organized speculation is publicity itself.

Summary of the Chapter

The indirect effects of the facilities afforded by organized speculation upon the world of commerce exhibit its value in a better light than the direct effect of fixing prices. While the prices made are subject to criticism in that they are often artificial, the business of the exchanges is so closely articulated to the outside commercial world that it works with the utmost smoothness in relieving the business community of many of the uncertainties of business.

The speculative exchanges furnish a continuous market in which all transactions can be liquidated during exchange hours. This important service makes Wall Street the centre of the financial system, as it is the only place in which financial error may be atoned for and freely liquidated. It gives stability to the loan market, and renders possible the enormous business of lending upon stocks, securities, warehouse receipts, and other collateral, its excellence as

an agency in facilitating this business being indorsed by the banks. The stock exchange does not cause panics, but saves us from the worse effects of them, as it bears the burden and takes the responsibility when the worst results of financial excesses are threatened.

The exchange market, not only for commodities but for securities, furnishes the place where hedging in all its various forms may be best undertaken. It serves to knit together all business and gives a wide field to the principle of insurance. It is especially valuable in giving the small business house the necessary security in doing business, so that it may compete successfully with its larger rivals.

The exchange gives free play to the modern principle of specialization. It produces a world market where broad conditions are given due weight, and which serves as the basis of all markets, but it leaves to local influences the special task of adapting these world prices to the conditions of a particular place. The prices fixed upon the exchanges, from the broad vision of those who make them, serve well to direct commerce in its important divisions, and, in the course of trade as reflected in market quotations, a prophecy is given in regard to business conditions which it would be well for all to heed. The speculative process reduces costs and husbands resources, building up a stock of commodities for use in case of crop failure or other disaster. The means adopted to accomplish this purpose are of the most modern type. Publicity is a prominent feature; and the central idea in all the activities of the exchange is to give free play to commercial forces, to unite without restricting, to promote solidarity without crushing the individual.

CHAPTER V

MORAL AND SOCIAL VALUE

THE affairs of this world are so regulated that a utility will often be created even out of something which in its nature is vicious. As the saying is, "There is no great loss without some small gain." The opposite also is true, that a beneficent agency may be accompanied by counteracting influences which nullify even the best commercial tendencies.

Speculation of itself is not wrong; it is helpful, not injurious, to the country. The speculator performs a useful service in relieving others of certain important risks; and if the speculative exchanges furnished facilities for this, and this only, there would be little criticism of them. But coming with the legitimate speculator, we find his counterfeit and imitator, the adventurer, a gambler who enters the speculative markets for the principal purpose of gratifying that love of excitement which he craves. Thus the speculative exchanges are so perverted from their true commercial purpose that they pander to one of the most depraving of human instincts.

The Gambling Spirit

It is well known that the spirit of adventure that leads one to risk his money merely for the excitement of taking risks is one of the most persistent of anti-social forces. This spirit may be gratified in different ways; and the many who have the unnatural craving seem to be ever watching for an uncertainty on which to hang a bet. A gambling game may be played for the purpose of making uncertainties, but any fortuitous event may be utilized. For in-

stance, we may have betting upon the weather or an election, and, in the speculative markets, we have a series of fluctuating prices which afford all the uncertainties which the gambler so passionately desires. Nor is it necessary to go through the form of making an actual bet. Where there is organized speculation, the gambler has merely to give his order either to buy or sell, put up his money, and straightway he finds himself enjoying the excitement of a gambling game.

For the evil which comes from such a transaction is not due necessarily to its exact terms, but rather to the spirit with which the enterprise may be entered into. If the terms of an agreement were the actual criterion for deciding upon its nature, then a contract of insurance would be a bet; for, in such case, the insured simply stakes a sum of money against a larger sum according to the doctrine of chances that he will die within a specified time. Yet insurance is everywhere recognized as most valuable both from the individual and from the social point of view, and, for obvious reasons, is seldom resorted to for gambling purposes.

On the other hand, it is quite possible to gratify the gambling spirit, even in transactions where there is actual delivery of a commodity. In short, the writer takes the position that the question of actual deliveries is not the criterion which determines whether an institution is socially valuable. The greatest injury can be wrought upon the moral welfare of the business community where the gambling spirit is fostered, even though there be no actual gambling in the strict sense of the word.

If an enormous elevator were built at the side of the Chicago Board of Trade, and if each trader were assigned a bin in that elevator, and then, by the use of the telephone and powerful machinery, the actual wheat were delivered to each trader in his bin as quickly after buying as deliveries are made in a retail store, the moral nature of the transac-

tion and the social injury wrought would not be changed a particle. The speculator and the speculator's family would suffer as great a wrong, and the commercial world would be as much injured, if the money were lost in transactions where a commodity is delivered as where it is not delivered.

Or, considering the stock market, does any one hold the idea, because stocks are delivered on the next day after a trade is made upon the New York Stock Exchange, that therefore trading upon that exchange is more moral than upon the European bourses, where the deliveries are longer deferred and trades more frequently carried for the account? Indeed, most experts would take the opposite view, and would hold that, owing to the greater daring and recklessness of American speculators, the New York Stock Exchange is a more potent factor for evil than the slower-going bourses of the Old World.

Or again, let us consider forms of business other than the speculative kind and the manner in which they are conducted. Many business men are most reckless about what among speculators would be called the size of their margin. In other words, they have an extremely small amount of actual property in proportion to their indebtedness. Hence they meet, in most cases, with disaster. But, perhaps saving something from their creditors, they enter the field of business again, running as large an estabishment as the use of their credit will allow, only, of course, to meet disaster as before. Still the fallacy of their methods is not realized. Again the business man is ready to risk all he can lay his hands on. Money is borrowed from friends on representations that are often fraudulent, and yet another time the infatuated seeker after riches is led to failure, while, in some cases, his reckless adventures are only ended by suicide.

The infatuation for doing business, when the business man lacks the proper qualifications, is just as pitiful, even though he trades in actual commodities with actual deliv-

eries, as the adventuring spirit of the gambling speculator upon the board of trade, who puts off deliveries for several months in some cases, and, in most cases, makes none at all.

It is not necessary to consider extra-hazardous forms of business, such as hunting for gold or oil in paying quantities. Even agriculture has its full quota of those who risk all in reckless ventures. The prospective farmer will emigrate to some untried section of the country, going in debt for his farm, tools, and live stock, with only a small equity (margin) to protect him from the results of miscalculation; thus staking everything upon a bountiful season, and reaping, in most cases, the harvest of misery which his gambling spirit entails. About fifteen or twenty years ago there were many riskers of this sort. Certain sections of the country, which were thought adapted to agriculture, were found susceptible to drought, and at the same time the prices of agricultural products were low. The adventure of trying to cultivate those lands was not proving a success, and the same kind of misery that comes to the unfortunate speculator was the lot of those ruined men who slowly dragged themselves back to the more settled and fertile parts of the country.

It is impossible to form a correct opinion about the real evil of organized speculation if we stick to the criterion of whether deliveries are or are not made. It is not objective phenomena that lie at the basis of the social injury; and those writers who undertake elaborate descriptions of speculative methods, showing that a certain number of deliveries are made, with a view to demonstrating the worth of speculation viewed as a social factor, are but wasting their efforts. Any kind of adventuring is likely to lead to human misery if the adventurer risks all he has and is not able to make a wise choice in the selection of his undertakings. Every business man owes it to himself, his friends, and his family so to order his business policy that each risk that he

takes is founded upon an intelligent consideration of actual conditions; he should never undertake any business enterprise unless he has enough resources to give the undertaking a fair chance of success and to leave him in case of failure with sufficient means to make a new start. If he risks all recklessly, he is but taking the gambler's chance, and is almost certain to reap the gambler's harvest of financial ruin.

A Charge that is True

There is, however, one charge against the speculative exchanges that must be admitted. The general effect of their advertising and personal soliciting of business is to make the taking of reckless risks attractive. Thus some of them knowingly endeavor to make that which is really extremely difficult appear easy. The brokers are as a class rather above than below the average business man as regards personal honesty. The weak point in their moral armor is that they are in a business in which almost every one loses; and they encourage the people to trade, well knowing the probabilities are that such speculations will prove unprofitable.

An article appeared some years ago in "The Independent," entitled "The Confessions of a Stock-Broker"; and the editor of that periodical makes a notation in the way of preface that it was written by a well-known stock-broker whose name, for obvious reasons, should not be known. In the confession the broker states the attitude of his house as follows: [1] —

"Our office partner, when asked by a client for an opinion, usually ascertains what it is the client wants to do and then gives him such arguments in favor thereof as seem to him to be good — unless, as occasionally happens, there are really strong arguments on the other side which seem to him to be sufficiently important to warrant him

[1] Vol. LXI, pp. 1468–1469.

interfering for the customer's own good. This does not often occur, but it does sometimes, and our 'office partner' has more than once prevented a customer from doing something foolish — at the cost of a brokerage.

"We admit that people who speculate will, in nine cases out of ten, lose money if they keep at it. We admit that we cannot guide them with any certainty in their market operations. We admit that we want as many customers and as many brokerages as we can get. And yet, if a man came to us and said that he wanted advice as to whether he should speculate or not, — he knowing nothing about it, — I think we should candidly advise him not to do so if he could not afford to throw away the money he proposed to risk (which no man in his heart expects to do), but we should also say that if he insisted upon speculating we should be glad of his business. That about represents our attitude. People *will* speculate and *will* lose their money, whether we do their business or not, and we feel that we might as well do their business as let some other firm do it. When people speculate with us, we do the best we can to help them to be successful, but our best, we must admit, is very small."

The above quotation is not inserted because it is thought that an anonymous article in a popular magazine is an authority upon a subject, but rather because the article well expresses the attitude of the better class of brokers and commission men. It would be beyond the purpose of this essay to discuss as a question of pure ethics the broker's position. The reader is left to consider the moral aspect of the situation according to his own ideas of right and wrong. It will only be called to mind that some brokers are not so scrupulous as the one just quoted; that some of them send out circulars in which every encouragement is given the intending speculator; and that, in conversations about their offices and elsewhere, they are continually urging the most reckless ventures.

To be perfectly fair about the matter, however, the question may well be asked whether our moralists are prepared to take the position that it is wrong to urge any one to engage in a business in which there is a possibility of success, even though the chances are that it would prove disastrous. There are other forms of business in which commodities are actually delivered, where the same moral question arises, and it is needless to say that great difference of opinion exists. Some take the position that a sane person of mature age should be competent to make his own choice in regard to his business enterprises; while others hold that temptation should not be thrown in the way, even of those supposedly able to make an intelligent decision.

Considering the question as a social problem, however, we cannot fail to note that this host of brokers, even though they may, when their advice is frankly asked, tell an intending speculator to leave the market alone, are yet in possession of effective persuasive powers, which are used with little restraint in getting business. The market review written by those skilled in attracting a clientele, the elegantly furnished offices where all is so comfortable and where the most plausible theories for making money are constantly heard, and the gambling instinct so deftly pandered to — all combine to cause the ruin of many who would otherwise continue as useful members of the community. Organized speculation as it exists is a terribly persuasive power, which unsettles the judgment even of intelligent persons, and, appealing to certain common weaknesses of human nature, leads thousands every year to the ruin of a gambler's life.

Corporate Dishonesty

Wall Street and the corporations are so intimately connected that to the minds of most people they are synonymous terms. Yet the two are in reality distinct. There may be, and have been, scandals concerning the management of

corporations, and yet not a word of that scandal has been reflected upon the stock exchange itself. So, too, the manipulations of stocks by Wall Street speculators have no necessary connection with the management of corporations. The president or other officers of a railroad company, for example, may all be engaged with some problem of construction and equipment at the very time when there are important bull and bear movements upon the exchange.

Nevertheless, it must be admitted that there is great temptation for the officers of a company to speculate in its stocks, and to use their private information as a means of furthering their own interests in a speculative way. The temptation is all the greater from the fact that it is the business of the higher officers of a corporation to attend to its finances; and the borrowing power is increased, and the credit of the corporation made better, if the stock be so esteemed that it sells at a high figure. The management may detest the methods of the stock manipulator, but they can hardly do aught to discourage him, when they know that he is seeking to enhance the value of the property for which they have become responsible.

It is difficult to draw the line as to how much interest the corporation manager should take in stock exchange quotations. To some extent he is forced into the market by the very process of conducting the finances of the company; but, being in, he may be gradually led into some of the practices of the stock manipulator, even to the dishonest expedient of seeking to depress the value of the stock of the very corporation that he has been selected to protect.

This actual destruction of property, fraud or robbery, according as it is viewed, cannot be too strongly condemned. It is the worst form of the combination of speculative activities with positions of trust. The instances where it occurs are much rarer than is popularly supposed; and with the growth and systemization of commerce, and with publicity and interest in large corporations, there is not

so much of it as formerly. The corporation wrecker, even if he succeed in making a profit by his wrecking tactics, must find some place to invest his gains; and his investment of them gives him such a stake in the prosperity of the country that it is not for his interest to seek to depress industrial conditions.

But whatever relation there may be between the temptations afforded by the stock exchange markets and corporate dishonesty, the connection is by no means a necessary one. Probably the most numerous cases of fraud and mismanagement are such as have been found among corporations that are not listed upon the exchange. Thus the managers of a corporation may so conduct it that the stock becomes, or appears to become, valueless, in which case it may be purchased from the ruined holders for a song. It requires no stock exchange to accomplish this familiar process of freezing out.

Another form of mismanagement which has no connection with the exchange is that whereby a corporation manager, acting in his fiduciary capacity, deals with himself as an individual in such a way as to give himself the best of any bargain or contract entered into. This highly discreditable form of dishonesty must be carefully distinguished from any possible evils furthered by speculative exchanges. It can readily be practised by any one occupying a position of trust in a corporation whose stock is not sold upon an exchange, or even in the case of an ordinary business partnership. Nevertheless it must be admitted that the system of short selling that prevails on the exchanges furnishes special facilities and temptations to resort to dishonest methods. Thus the corporation wrecker may sell the stock of his company short, and make a profit on the decline, in addition to the other forms of profit just mentioned.

Considering the question again in its larger aspects, there is no one about a stock exchange, whether it be broker, corporation manager, or speculator, who really benefits

in the long run from corporate mismanagement or any form of disaster. The stock exchange thrives upon prosperity; and it is more likely to be optimistic than to be the reverse. It depends upon security, and the profits of all are increased if the corporations whose stocks and bonds are dealt in can be relied upon; and, especially, if their management be sound.

The exchange, then, should be, and is, the great protagonist in favor of honesty in corporate management. One way in which it helps to accomplish this result is by its system of listing stocks for trading. Before a stock may be traded in upon the New York Stock Exchange, it must be examined by a committee; and if the stock does not meet the requirements of the committee, it is not listed. The reason for this can be none other than that the traders have an interest in seeing that the corporations whose securities they deal in are honestly managed and the securities properly issued. If the members of the stock exchange knew their own interests as well as they ought to know them, this requirement would be made more exacting. However, the changes in this regard are in the nature of progress. The worst abuses and by far the most glaring frauds perpetrated upon innocent investors have been in securities which are not traded in upon the exchanges.

False Rumors

There is a method, however, by which the officers of a corporation may cause market fluctuations without necessarily affecting the physical condition of the property in their charge. It consists in spreading false rumors in regard to the corporation, and at the same time scalping the market by the aid of the fluctuations so caused. For example, the speculative director may make a short sale of the stock of his company. If the market goes against him, he may get out at a profit by starting a false rumor. He may, perhaps, remark to an acquaintance that the com-

pany will probably be obliged to issue bonds very soon. The acquaintance thus becomes possessed with the idea that he has a "tip" from an insider and spreads the rumor, even though he may have been told not to tell it. The rumor is soon the common talk of the street, and the stock quickly falls. The speculative director then covers his short and goes long, for he knows that a reporter for a newspaper or news agency will be likely to interview him or some of his associates in regard to the matter. When the reporter arrives at the office of the company, the rumor is of course indignantly denied, which denial at once goes out on the tape; and our speculative director finds that he has a profit on his long stock as well as the profit he has already reaped upon his short sale. This method of scalping the market by those in a position to know the condition of a particular stock, and able to affect its selling price by spreading false rumors, is of course wrong from a moral point of view, although it does not accomplish the purpose by the more clumsy or brutal method of wrecking the corporation.

Frequently the hopes and fears of the speculator are wrought upon by keeping up an air of mystery. There are vague hints of "melons" that are about to be cut and of "plums" for the expectant stock-holder; for it has been noticed, by those who study his psychological nature, that he is more affected by mysteries and sensational developments which can be easily grasped by the mind than by detailed statements of facts and figures which require study to understand.

An important feature of general policy may be shrouded in mystery for months; and all this time the directors may be milking the market by spreading false rumors so that it will move backward and forward according to their wishes. When the day for decisive action arrives, the directors will go into session, the market fluctuating rapidly all the time, reporters waiting outside the directors' room to hear the

news, and messenger boys hurrying back and forth carrying the orders of the directors now to buy, now to sell, according to the tips which are continually going out to influence the market fluctuations.

Sometimes the directors of a corporation surprise outsiders with some startling *coup*, as by declaring a dividend when least expected, or by changing the policy of the company by paying out, in the form of a dividend, a larger proportion of the earnings than was anticipated. A particularly notable case of the sort just mentioned occurred some few years ago and is familiar to all Wall Street men.

Any corruption by legislators is likely to take a different form from that of influencing quotations with a view to scalping the market. Still the question has been raised whether it is proper that the ticker should occupy a place in capitol buildings; and brokers have been fined for contempt and imprisoned because they refused to reveal the names of some of their clients.

There is nothing which obliges any person occupying a position of trust to speculate. But the market, being always ready on every business day and being systematized so that it is most sensitive to every rumor, supplies facilities for scalping to those who can influence it; and it can be easily influenced by any one occupying high official position in a corporation.

The Crop Killer

But it is not merely in the matter of the management of corporations that organized speculation gives facility for lying and the spreading of false rumors. The markets for commodities do not give opportunity for that betrayal of trust which is seen in the case of the speculative director; but, as for doing business upon the strength of lies deliberately made, the manipulator of the wheat and cotton markets is perhaps even worse than his prototype upon the stock exchange. The most usual method of manipulating

the market for agricultural products is by exaggerating any unfavorable conditions which the farmers may have experienced, such as drought, storms, and other catastrophes. This "killing of the crop," as it is called, is the favorite device of the manipulator, because of the nervous apprehension existing about possible crop failures and the manner in which the uncertainties of crop conditions readily lend themselves to exaggeration.

The manipulator, especially when he finds the commodity selling on an export basis or near it, loads up with a large quantity. His interest is to advance the price, as he knows that it can be more easily put up than down. But when no particular calamity falls upon the crop, one must be imagined. It is here that the crop killer makes his appearance and does his work.

In any year, even of bountiful crop, there will be damage in some sections of the country; and, on the foundation of local damage, the most terrible calamities are predicted. The different experts set off for the region that is supposed to be in danger. They travel over it and continually send in reports of the most doleful character. Their reports come out in brokers' circulars and on the tape and are printed in the newspapers. But when the time for harvest comes, it will usually be found that the damage has been much exaggerated and excellent receipts will come in, even from the region in which the crops were supposed to be greatly injured. So utterly misleading are most of these crop reports furnished by interested parties that the question of crop reporting has become a joke; and it is the common remark to be heard on 'change that no reliance can be placed upon them. Yet it pays to send out these deceptive reports, as the inexperienced, and to some extent the experienced, speculator may be deceived by them.

The government report, which comes out once each month during the growing season, is much more reliable, and, of course, is eagerly watched for. But, even in the case

of the government report, scandals are not unknown. Unfairness is most frequently charged in the matter of letting certain parties know the percentages of crop conditions before others. Different times of the day have been set for the giving-out of the report in order, if possible, to diminish the speculative excitement. Thus it is that these squabbles among the speculators, together with their charges and recriminations, fix upon the onlooker the impression that the standard of morality among them is not particularly high; and, when he realizes that it produces such men as these, may arouse grave doubts even of the value of organized speculation.

It then appears that lying is taken as a matter of course upon the exchanges; and the general effect of all this trickery and deception is demoralizing in the extreme. So common is lying among speculators that an air of suspicion pervades the dealings. Every one about an exchange seems to be watching every one else, either to detect some fraud in others or to make some kind of a grab himself. All of which shows that, if organized speculation be not gambling, it has many of its morally depraving features; and the undoubted services of our organized markets are offset by the undesirable features which come in with them.

Some Discrepancies and Contradictions

The different practices of organized speculation and the imitations of it are not the same in their moral significance and their effects on general social conditions. The bucket shop is not, properly speaking, speculation of any kind. But it possesses the outward appearances of a broker's office; and it is difficult at first for a trader to ascertain whether his deals are bucket-shopped or whether purchases and sales are actually made upon an exchange. In markets furnished by organized speculation, deliveries are made, and such markets have great effect in establishing prices for the articles traded in. The bucket shop, how-

ever, has nothing to do with real commodities or securities, except that the names and forms are used; and there may be large bucket-shop operations without affecting to any degree actual trade.

The crossing of trades occurs where a broker has an order to buy and one to sell a particular commodity or security at the same price and at the same time, but for different clients, and executes the orders by entering one against the other. This practice is illegal, as our law does not allow any one to be the agent for both the buyer and seller in the same transaction; and it throws temptations in the way of the broker which might be abused. The rules of exchanges are not the same upon the matter, but it is forbidden in most of its forms. When it is realized, however, that a large commission house has numerous orders both to buy and sell coming in during exchange hours which must be executed rapidly, and that it may have several partners or employees in the pit executing orders, it is seen that some form of crossing trades is almost unavoidable. In this connection the fact might be noted that in European bourses and in financial and banking houses that deal in stocks on the Continent, some of the common practices bear a strong resemblance to what we in America would call bucket-shopping and crossing of trades.

Bucket-shop deals, the crossing of trades, and legitimate exchange trading almost imperceptibly shade into one another; and it is no wonder that opinions differ as to exactly where the lines should be drawn. But those who contend, as many do, that there is no difference between them, are not reasonable in their argument. One might as well attempt to prove that there is no difference between a plant and an animal because scientists have difficulty in some cases in determining whether a particular specimen belongs to the animal or vegetable kingdom.

Privileges constitute another interesting feature of speculative trading, the social value of which can only be justly

estimated by using the nicest discrimination. If a prospective purchaser of real estate is not certain whether he wishes to buy a particular property, he will, in some cases, get the owner to give him the refusal of it — that is, to hold the offer open for a time till arrangements and investigations can be made and conclusions reached as to whether it is possible or advisable to purchase. Such an agreement is frequently put in writing in a form enforcible by law. The prospective buyer of the land and the actual buyer of the option will, for instance, pay $10 for the privilege of buying for, say $5000 at any time within, say sixty days. The principle of such a contract, which real estate men call an "option," is the same as what exchange speculators term a "call." And yet that which real estate dealers consider a perfectly legitimate business operation is looked at with horror when done upon a speculative exchange.

A "put" is the opposite of a "call"; for, if a trader owns a put he has the privilege of selling, or putting, a certain commodity or security at a specified price within a certain time. Yet these privileges, when dealt in on an exchange, are prohibited by law and by special rules; and officers and members, who see no wrong in ordinary exchange trading, frequently denounce them as pure gambling. But why it is that that which is right when done in handling real estate, is wrong when done in handling grain, is difficult to understand except from a practical standpoint.

For what is the way in which these contracts are used in practice? A trader will buy a put on July wheat, say at 90. Then he will watch the quotations during the day, hoping for a chance to "buy against it"; for he knows that, if the market goes low enough, his broker will accept the put as margin or security for a deal in the particular future. In case the market does not go as low as expected, the trader only loses the amount paid for the put, and has enjoyed the pleasurable anticipation of high possible gains. Occasionally such hoped-for profits are actually realized, as

the market will go into the put and move backwards and forwards several times during the day, enabling him by scalping the market to make a large percentage of profit on his small investment. The exercise of ingenuity in planning the scheme, and directing the operation during the day's market, afford just about the amount of opportunity for thought and exertion which some traders wish; while the possible profits, so seldom reaped in practice but so large in comparison with the amount ventured, afford full play for that deceptive confidence — that hoping against hope — which is such a prominent characteristic of the mental processes of the speculator or gambler.

It is possible to imagine uses for privileges in a legitimate transaction in stocks or futures. They could be used, for instance, as a hedge or insurance; but, while the forms of hedging described in the early part of this essay are practicable and are used extensively by flour-millers, cotton-spinners, and others, privileges give but an imperfect protection and are highly expensive. Thus, suppose a trader has bought a wheat future at 90. If he buy a put to protect the purchase, there will be some spread. Let us assume it to be one cent and that the put was purchased at 89. The privilege will then do the purchaser no good till that figure is reached; and it is the exception, rather than the rule, when the market goes in the puts. The market may close a fraction above 89; and it may be necessary to purchase another put for the next day, which may turn out to be as bad an investment as the first. And it is quite possible to have an extreme decline, with the market closing above the puts each day, in which case the purchaser loses money on the long wheat and has the puts to pay for in addition.

Considered, however, as a question of practical morals, and from the point of view of the social value of organized speculation, privileges must be considered as doing more good than injury to the community. The reason is,

that, if the unskilled trader must speculate, it is better he should do it through privileges, since he knows in advance just how much his possible loss will be, and is not led into venturing enormous amounts of money which he needs for other purposes.

The Test

In making the test and forming some estimate of the net value of the speculative exchanges as factors in the world of commerce, it is not fair to make the comparison on the assumption that business methods are of spotless purity elsewhere. Every group of business men, or of any men, have faults; and these faults are frequently peculiar to the calling of the particular group. As illustrations, attention might be called to the fact that adulteration is practiced in many kinds of manufacture, and that poison has been placed in articles intended for human food, even in such as are never sold upon the board of trade.

Furthermore, the speculative exchanges have certain virtues, and the men of Wall Street and of La Salle Street have, in some respects, an even higher standard than prevails elsewhere. In the matter of doing as agreed, the brokers are most scrupulous. Contracts involving enormous sums of money are entered into in the midst of the wildest confusion; and it may be truly said, in making the comparison, that a word or a nod upon the floor of an exchange is better than a bond entered into elsewhere. There is not that evasion in carrying out contracts which is found in other lines of business.

The members of speculative exchanges submit many of their misunderstandings that might otherwise develop into suits at law, to the arbitration of a committee, which does away with a considerable portion of the legal forms and red tape of judicial procedure. And the rules of the exchanges, which the members submit to, bind them to a higher standard of business scrupulousness and cover more

points of commercial honor than are contained in any legal code. The grading of commodities is arranged for either by law or by exchange rules which are generally fair; and, referring to the sales made by sample, it is remarkable with what facility they are effected and how few quarrels result.

It must, indeed, be confessed that there is a great deal of deceit and bluster in all kinds of business. The difference in this respect would seem to be that the wrongdoing in organized markets is greater before a contract is made; but, after a contract is entered into, the exchange members are more scrupulous than business men upon the outside.

A Summary

Summing up, however, and looking at the question in all its different aspects, it must be admitted that the business of the speculator is not one which, in its present development, gives the moral discipline seen in other forms of trade. The particular fault of speculation is the fact that it nurtures the gambling spirit. It gets men into the habit of seeking to take advantage. In ordinary business transactions it is generally supposed that all parties to a contract are benefited. A contrary impression prevails upon the speculative exchanges, for it is supposed there that what one party makes, the other party loses. This impression is frequently a false one, as has been shown heretofore. But the transactions upon the exchanges in which both parties profit are exceptional, and the minds of the speculators are too often fixed upon some sort of trick or illegitimate form of gain.

Speculating upon the exchanges is not necessarily gambling, but it has, in some cases, the evils of gambling. There is the same disposition to get something for nothing, the same temptation to cheat in order to make a venture successful. The average speculator upon the exchanges is always losing, but he is not willing to admit that any part of his losses is due to his own folly; so he throws all the

blame upon others, and soon becomes fully educated in the school which assumes that he has a right to cheat whenever he can.

The injury which speculation does to the individual is recognized on every hand. Positions of trust are usually barred to the man who speculates. Business men know that the temptations which beset one upon the exchanges are such that many are unable to resist them. Everywhere the instances of those who have been led to commit crime by reason of speculation are brought to our attention. The newspapers often conclude the story of a defalcation or suicide by the statement that the crime was committed as a result of speculation; and similar instances of ruined lives come so frequently under the observation of every one that such statements are taken as a matter of course and need little verification.

When any one seeks to get a bond for the faithful performance of trust, one of the questions asked is, "Do you speculate?" The writer knows of a case where a reference wrote, "I give this man the highest recommendation in every respect except that he will speculate." The indemnity company refused, even in such a case, to give the bond. While holding no brief for the speculative exchanges, and while trying in no degree to minimize their faults, let us seek a historical explanation.

A Historical Explanation

In the evolution of business, the student will frequently note that, as each new type makes its appearance, it seems to bring with it some form of abuse or perversion to which it is especially subject. But as time goes on, and business men come to understand the new activity, and come to give it its proper place in the commercial system, many of these abuses disappear. The inertia of human institutions seems to cast a shadow of prejudice over any new form of activity; and those who enter into an enterprise, which has

not been fully recognized as necessary and productive, are not likely to be in all cases the most scrupulous or conservative in the community. Hence, looseness in morals is more prominent in those forms of human activity which have not been fully tried out in the school of experience. Much time is necessary, it would appear, to build up around any business a code of laws and customs to protect the trade.

Examples of this prejudice and of the unscrupulous manner in which a new form of business is conducted are numerous. The introduction of the modern factory system was accompanied by grave evils, child labor being the most conspicuous. Yet there is a pronounced tendency, as the factory system has progressed, for child labor and other evils to be eliminated. The lending of money, too, was thought at one time to be a disgrace, and usury laws, even at the present day, are a relic of this prejudice.

Speculation is as old as commerce, but organized speculation is a recent growth. It is true, the germ of speculative exchanges can be traced to the ancients; but it is little over a century since trading upon the stock exchanges has assumed great prominence as an economic development, while trading in commodities on a large scale for future delivery is hardly half a century old. The abuses which were found with organized speculation from its start are such as might be expected to find lodgment in a form of business which so closely resembled gambling. Hence the evolutionist sees nothing at which to be surprised in the history of speculative exchanges or the faults to which they are subject; and he notes that there have already been reforms which are proceeding in regular evolutionary order to right abuses. For there is growing up about the speculative exchanges, as well as in other forms of business which are in the early stage of development, a code of customs and laws and a fund of experience which will in time adequately restrain the crudities which are now so prominent.

Let the pessimist take from the shelves of his library "Chapters of Erie," by Charles Francis Adams, Jr.; let him note the period when the events narrated occurred; and he cannot but be impressed with the fact that in former times there were more unscrupulous financiers than at present.

If we compare the evolution of different forms of commercial activity, we find organized speculation developing later than most of the other forms. We find it beginning low in the scale, and when we compare it in its infancy with industries that have already had thousands of years to develop, it suffers from such a comparison. But speculation is all activity and searching, and the investigations which it brings about reform not only itself but other kinds of business. It was the spirit of speculation and the facilities offered by our organized markets which urged on some of the investigations into corporation frauds two generations ago. It is organized speculation, sobered and made conservative in our markets, that has demanded precautions to make that speculation safe; and which, in its searching process, will weed out the corporations that are improperly managed.

Speculation in commodities, having assumed its present form at a later period and being less understood, has not progressed so far in its evolution as speculation upon stock exchanges. Hence most of the complaints at present are leveled at the grain and cotton exchanges. Corners, for instance, are at the present day more numerous upon such exchanges and manipulation is probably more frequent; although here again the principle of newness appears in a reverse position, for it is seldom that new commodities are introduced into speculation, while new issues of securities are frequently made with the many abuses which attend their marketing.

Summing up the historical explanation, it may be said that organized speculation is a form of business which has

been introduced in comparatively recent years; and, like most new forms of business, it has certain moral and social abuses connected with it. Great progress has been made in eliminating these abuses, since the conservative speculators find that it is for their interest as a body to remove all risks possible. Furthermore, speculation is a force of great activity, which rapidly reforms, not only itself, but other kinds of commerce.

CHAPTER VI

THE ALTERNATIVE

A Natural Development

ORGANIZED speculation has its evils. No one has attempted to deny that fact. These evils are extremely serious, as they involve the moral development of the commercial world. Hence, in computing the value of organized speculation, we find that, in its most important aspect, it exists as a disutility. Admit what its advocates claim for it, — that it steadies prices, that it fixes the values on which all commerce is based, that it specializes functions and puts the risks of the community on a special class which voluntarily undertakes them, — yet, if it be shown that its net effect makes toward moral degradation, it can have no real value to any one.

But a system of conducting commerce which has grown up as a natural evolution cannot be lightly put aside; and when an attempt is made to turn backward the course of development, it is frequently found that the evil features of an institution persist while the excellent ones perish or are modified. If the present status of an institution or an industry be taken as the only factor which determines whether or not it should be swept away, then many of our present arrangements would be doomed. For instance, it might be called to mind that, in the modern system of manufacturing food products at large factories, poisons have been placed in the packages put up. But poisons are destructive of human life, and human life is more important than processes of production. Hence might follow the conclusion that it would be better for us to go back to the original state in which each family produced its own food. But such a

reductio ad absurdum shows the falsity of the above argument. It is the same with speculative exchanges as with any form of evolutionary development. They cannot be swept aside by any fiat, legislative or otherwise.

The Problem

The problem is so to reform organized speculation that it will not lose its place as a step in human development, and at the same time to strike at its distinctly evil features. This is the same problem that presents itself in connection with many another social institution; and, to the impatient reformer, this alternative is most disheartening, because it is readily seen that it is impossible for the people to learn how to use the perfect instrument of a fully developed commercial system without a change and further evolution in human nature, which at the least would require centuries of time. And those who rashly seek sweeping reforms are likely to attempt the abolition of features that are not a direct cause of evil, but which, on the contrary, are essential to organized speculation as it exists. If a proposed reform should strike at an essential principle, it would, if adopted, so bind and cripple operations upon the exchanges that we could have no really free market.

For the underlying principle of organized speculation is not that of a government or board organization which may be conceived of as acting in a body to determine the course of prices. On the contrary, the word organization and its derivatives, used in this connection, refer to the fact that a number of men are so united that they may act individually to determine prices through their knowledge of the demand and supply. The organization is formed to remove friction and to provide a perfectly clear field on which there can be the freest interplay of the different commercial forces.

Buying and selling, then, must be free if progressive organized speculation, as usually understood, is to be

retained. A trader, for instance, should be allowed to buy before he sells and so to speculate upon the bull side of the market. On that point nearly all are agreed; but some are of the opinion that the speculator should not be allowed to sell before he buys, and so to speculate upon the bear side. Yet a market in which a trader could not speculate in that way would not be a free market.

A Crippled Market

Considering other kinds of business, it is seen that the dealer has the right to sell before he buys and that short selling is by no means uncommon. If the same freedom be not allowed upon the exchanges, the result is only a crippled and distorted form of organized speculation; for the fact cannot be too often adverted to that it is impossible to constitute a market solely for buyers or solely for sellers, and if you cripple the selling power, you cripple also the buying power. If speculative short selling be shut off, the number of speculative buyers is thus necessarily reduced, because buyers will not habitually resort to a market in which sellers are not free to act. If the sellers are limited to those who have heretofore bought, the market is of too restricted and narrow a character to be called an organized market in the modern sense. If short selling were abolished, our speculative exchanges as they exist to-day would also be abolished. It is not a supposedly ideal state that might exist under the conditions suggested, but rather the actual alternative which would be likely to exist, that should engage the attention of the practical reformer.

Monopoly

Examining the business houses as they compete with one another in the field of industry, it is noticeable that they are by no means of equal strength. Indeed, the greatest diversity exists in regard to their size and in regard to every other element which makes for power in the commercial

world. The large business houses are usually those which have been successful in performing some service, whatever it may be, more cheaply or efficiently than their competitors. Thus a young man, by entering the field in a particular business, by saving his profits and adding them to his capital each year, and by inducing others to associate themselves with him, may finally cut so important a figure that his house is said to have a monopoly or semi-monopoly in its line. Furthermore, smaller business houses, each having had greater or less success, may unite; and the combination may do so much business that it comes to be generally regarded as a monopoly. Yet the principal reason why a large combination occupies an important place in a particular industry is because it can accomplish a service more cheaply or more efficiently than others can.

If the business conditions in a particular line are made so attractive that excessive profits are reaped, then there is always potential competition ready to assert itself. For instance, another large corporation enjoying a preponderating influence in another industry may conclude to extend its activity and enter the field which presents such allurements.

The business conditions which furnish the best opportunity for a competitor to enter the field are found in cases where the selling price of the finished commodity has been forced to a high level, or where the purchase price of the raw material is very cheap. When such conditions exist, competitors of all kinds are likely to appear. Even a small business house has certain advantages which enable it to enter a particular field and compete on equal terms with the large company or trust; and there have been notable instances where small business houses acting separately have been so well managed, — their managers having personal supervision and direct interest in conducting the business, — and they have been organized upon such a sound financial basis, that they have actually driven a trust, which was

supposed to have monopolistic power, into bankruptcy and ruin.

There are advantages and there are disadvantages in conducting business upon a large scale; and, at the same time, there are advantages and disadvantages of an opposite nature in smaller enterprises. But what is an advantage in one form of organization may be a disadvantage in another. Thus the manufacture of goods in large quantities can be so systematized that the large manufacturer has, in that respect, the advantage as regards efficiency over his smaller competitors; but, on the other hand, the more careful supervision given the process of manufacture by the small business house may have quite the opposite tendency.

The views above expressed, as to the adequacy of natural business tendencies to furnish an ultimate settlement of the trust problem, are by no means shared by all those who discuss the subject. Yet it is believed that the reason why many writers and speakers are of the opposite opinion is because there are so many abuses whereby a trust profits which are considered normal as a matter of course, but which, nevertheless, are unfair when considered from an ideal standpoint.

To examine each industry in detail, to note how a surplus arises to this factor or to that factor, to point out the methods of reform which will give to each its just reward, putting all on an equality and yet securing perfect mobility and every feature of the competitive system, is the most hopeful and the best opportunity for field work in the entire realm of economics. An inquiry which sought thus to prove inductively the thesis stated would, let it be emphasized, be a detailed one; and the investigator would find in many cases that a factor had an influence quite different from that generally supposed. If the sweeping generalities and prejudices which becloud the subject could be got rid of, it would be found that a system might be devised whereby competition would work so justly that the

gross inequalities seen at present would many of them disappear. In the meantime a proposition may be stated on which all will agree, — one which brings us to the point where the question of monopoly touches the question of the value of organized speculation.

No small business house in its competition with the trust or large company should be deprived of any help or agency which exists as a natural part of the world of commerce. No law should be enacted, no system of tariff or taxation should be forced upon the people, giving the large company any power to destroy its smaller rival which does not belong to it from its natural efficiency or economy in supplying its service. Furthermore, the legislator should be especially careful not to destroy any agency which already helps to put the small business house on an equality with its larger competitor. The above considerations are sufficient to show the point at which the question in hand touches the general field of economics; and affords, it is believed, a sufficient basis for a discussion of risk-taking as it comes into relation with the question of monopoly.

Among the democratic influences of commerce which have grown up by voluntary action, and which serve to give the smaller business house advantages equivalent to those enjoyed by the large company, is the custom of insurance. A man with vast business interests does not need insurance so much as small operators, because his interests are usually so distributed that a fire would not be likely to destroy all of his plants at one time. But, by the aid of insurance, the small business man may undertake venturesome business enterprises and compete with the large company or trust on more favorable terms.

The speculative exchanges, as they are utilized in the process of marketing and distributing commodities, constitute a kind of underwriting organization in its broader sense, and render it possible for men of moderate means to engage in a wide field of business operations. If this form

of insurance were abolished or crippled, many of them would find no profitable employment for their capital or their activities, and only those would remain who have sufficient capital to insure themselves.

The speculative exchanges deal in commodities or securities of uncertain value, and are so articulated with the commercial system that the business houses which are producing and distributing these commodities can be relieved of the risks which come from changes in price in different periods of time. But, in the absence of this form of insurance, the small merchant or manufacturer could not with safety continue his dealings. The alternative naturally offered is that of a large business house with numerous branches which would assume the risks and conduct the trade.

Such a business enterprise would naturally take the modern form of a corporation or trust and would be able to look at things from a different standpoint from that of the small business man. It would be possible for it to gain control of the production of a commodity, and to handle all the processes from the raw stage to the completed product as it enters into consumption. A company of this sort would make the packages in which the product of its plant is to be carried; and, if the commodity were bulky, it would have much to do with its transportation in the various stages of manufacture. A company with such a wide control could dictate prices within certain limits, and hence would not be subject to many of the risks of the small business house. Whether such a system be advantageous or not, where it naturally grows up without adventitious aid, it will be recognized on all hands that it should not be allowed to establish itself by forcibly destroying the insuring or conserving institutions which would otherwise give the small business man a chance to compete on an equality with his larger rivals.

Turning to the wheat trade as an instance, if the small

buyer could not have his insurance against fluctuations in price, he would be at a distinct disadvantage. No one, in such a case, could engage in the business of buying and carrying wheat unless he had a large amount of capital which he was willing to use in this manner. The people who would naturally undertake this function would be the large millers and exporters of the cereal. They would enter into this branch of the business because, in the absence of the facilities afforded by the exchanges, they could take these risks with less cost than any one else, as they would have greater control of the flour market and of the movements of wheat, and are affiliated to some extent with the different transportation and distributing interests. Through their influence in these directions and by the direct aid of the factors of commercial power within their control, they could reduce much of the risk. But much of it would still remain for which they would need to be compensated; and they would get such compensation under the laws of competition.

At present most of the cost of risks in the prices of commodities traded in on the exchanges are paid in the ultimate analysis by the amateur speculators who run these risks because of their gambling instincts, and who, seeking to win from others, lose their own money. The losses of the unskilled speculators go, part of them to pay the commissions, interest, and other charges, but another large part goes to pay the penalty of buying at high prices and selling at low prices.

This enormous sum of money, consisting of the losses of the amateur speculators over and above the cost of maintaining the machinery of organized speculation, is highly important in this discussion; and the places to which it goes should be dwelt upon and emphasized. This money is lost, partly because of the weakness in human nature and partly because of market manipulations set on foot with the express purpose of getting it. But the market manipu-

lators do not get all of it by any means. In the babel of the pit, no one is certain as to exactly who may be the principal in a deal which a broker is offering to make. Thus an adventuring speculator, in his usual gambling way, may put over an order to buy, say 10,000 bushels of wheat, and his broker will bid for it. The wheat may be bought of another adventurer or gambling speculator or of some professional; or it may be bought from a producer of the cereal who will afterwards deliver it, thus marketing his commodity, we will say, at a good price. In this way, under our present system, the unsuccessful speculator pays the penalty. He pays the commissions and charges; and he pays most of the profits which the successful speculator gets; and he pays the difference between normal prices all the year round and the higher prices which prevail part of the year by reason of the corners and squeezes upon the exchanges.

If, however, the present system of handling commodities of rapidly fluctuating values were done away with, and the business undertaken by a monopoly, it would be conducted upon a strictly business basis. There would be no greenhorns, or amateurs, or unsuccessful speculators to pay expenses or profits to any one. A corporation having its grip upon the market for the raw material and for the completed product could at times suffer large losses and still be able to show excellent average yearly dividends upon the additional capital invested to carry on this department of the business.

In so far as the returns on capital are the compensation for risks undertaken by the monopoly, no one will question that it should be compensated, it being, under the conditions supposed, the best agency at hand to bear these risks. But the question is relegated to the citizen to determine, whether he be in favor of having the risk undertaken by a monopoly in this way, the compensation for it of course entering into the price of the commodity to the consumer, or whether he prefers the present system, under which the

risks are borne by a distinct class of capitalists set off for such risk-taking, many of whom make no net profit at any time, and who pay, not only the expenses of conducting the exchanges, but the profits of the manipulators and higher prices to the producer as well.

We have here a most interesting question of practical ethics combined with an economic problem. It is not the purpose of this essay to discuss any purely ethical question, but merely to point out the place at which individuals find themselves in such a position that they are obliged either to deal or to refuse to deal with persons who are acting in a non-ethical spirit.

Personally the writer holds the opinion that it is not morally wrong for the community to avail itself of the commercial advantage of dealing with a set of traders, even though these traders may be acting in the gambling spirit or from other uncommercial motives. To carry out any other doctrine consistently would require that our legislators interfere with industry at every hand, such, for example, as the production of commodities which might, or might not, be used for the good of the community.

As shown in other parts of this essay, the demoralization of speculation is not necessarily more than that of any business in which there is the gambler's chance of success or failure. Risks are necessary; and the mere fact that traders insist on taking them when they are not properly equipped for such an undertaking should not cause us to turn a free market into one which is not subject to the competitive principle.

For the problem in this case is different from that which is ordinarily presented in the question of monopoly, so-called, versus a free market. Under present conditions the large company and its affiliated interests find themselves underbid in many cases by the risk-takers upon the exchanges. If the trust could perform the service with less cost than it could be performed upon the exchanges, then it

would be able to drive them out of business or leave them as pure gambling institutions. But the large company cannot do this. It cannot bid as high prices for the commodity to the producer, and it cannot run these risks as cheaply for the community, as they are run by the speculators upon the exchanges. For many of the speculators run the risks for nothing, being driven to it by the love of gambling or speculative excitement afforded by the system of organized speculation. Hence we have a case in which the opponents of monopoly can make a stronger showing than they usually do. For we have here the inchoate trust or large company actually asking, not only that it be allowed full liberty to devour its weaker competitors singly, but that the law step in and actively assist it in so gaining a mastery. The strong and unharmed Horatius, not satisfied with the stratagem of separating his wounded opponents and slaying them one by one, calls on the arbiters to step in and fight his battles by butchering his enemies for him.

Such a demand as this needs but to be stated to show its unreasonableness. It is true that, under existing institutions, instances may be pointed out in which the state or the people collectively do take sides against smaller economic units and assist the monopolists in driving them to the wall. Nevertheless, all reformers who seek after commercial freedom should exert themselves in the opposite direction. The doctrine ought to be advanced that any unfairness in taxation or elsewhere in our present laws must be abolished so that a free field with no favors can be extended to the different economic factors. But the present condition of affairs should not be altered by striking down any factors which are distinctly competitive in their nature.

The speculative exchanges are distinctly competitive. They are voluntary organizations in which the economic units move over one another with the facility with which the molecules of a liquid body arrange and readjust themselves to suit the more rigid bodies which surround them.

With all their faults they constitute the chosen field upon which the larger and smaller units have a chance to compete under approximately equal conditions.

A Four-sided Contest

In the case of some industries, the trust or quasi-monopoly exercises its power with such discretion, and respects the rights of others with such discriminating care, that it does not pay for outsiders to enter the field. Such a trust, powerful alike by reason of its size and of its tactful management, may in some cases overshadow a speculative exchange that stands in its way. It would thus deaden speculation and relieve itself of the disturbing influence of the exchange. There are, however, but few instances in which a trust is able to accomplish this result.

The sources from which the speculative exchange derives its power are not the same as those which lie at the basis of the influence of trusts; for the men who specialize and make trading upon the exchanges their business are of a different type or temperament from the monopolist or would-be monopolist. The men who trade upon the exchanges, whether they be amateurs or manipulators, are of the speculative type of mind. They are of the type of men to whom uncertainties are pleasant, whether it be the legitimate risks of business or the purposely created hazards of gambling games.

Trusts, however, are formed by those who wish to escape risks and who place their interests in the hands of the speculative promoter, because he tells them that he will put them in such a position that they will be able to control the situation in their particular industry. For, back of all the formalities in the organization of a trust, we find first a number of business men who are dissatisfied with the price that they are getting or the price that they are paying; and they are combined by some man of nerve and energy who bears the burden of most of the risk and worry. The

promoter of a trust, then, is a man who performs for the constituent companies the same service which the speculator performs for business men in many lines, — that is to say, he relieves them of certain risks. And he, quite unlike the men that he unites in a trust, is affiliated with stock exchanges and is often a speculator himself.

The risks entered into by those who trade upon the speculative exchanges are shown by the fact that very few, even if successful for a time, permanently secure large fortunes; while the cautious nature of those whose plants are combined into trusts is shown by the fact that they usually take preferred stock for their share, leaving to the speculative promoter the common stock, which he can use in operations upon the exchange.

A man who has put his property into the trust form of organization may be, and often is, led into the speculative markets in financing the company. Nevertheless, for the reasons just indicated, it will in most cases be found that the manufacturers who control the constituent companies of a trust seldom become imbued with the spirit of speculation. For the psychological tendency that makes men seek those callings for which nature has fitted them will land one man in a speculative exchange as an operator there, and another at the head of a manufacturing house, with his interest centring in methods of production and in fixing prices which buyers must pay, rather than in profiting by fluctuations in price.

As a result of these psychological tendencies, we have the facts alluded to above — that a powerful company seeking after a monopoly will, wherever possible, crush out or cripple an exchange dealing in the commodity which it attempts to control. But most exchanges are of a lusty growth, and usually overshadow any attempt at monopoly which may appear. As before explained, the operations upon the exchanges are determined by the fact that most traders are amateurs, and that the large operators and

manipulators are men such as understand how to work upon the gambling instincts of the amateurs and so get their money. Hence we have two battles going on at once. There is the battle on the floor of the exchange between the amateurs and the professional speculators, and there is the battle taking place everywhere between the large company and its smaller competitors. Two influences, each of which has a powerful tendency toward artificial prices, have each a separate foe. But these influences are antagonistic to one another, and their foes also are antagonistic. Besides the battles above referred to, there are numerous minor struggles and cross-currents in this swaying mass of competing economic units. But the contest, at least in some of its aspects, assumes the form of a four-sided battle in which it is impossible for any party really to gain the mastery.

In the hearings before the different Congressional committees that have investigated the expediency of anti-option laws, and in articles in newspapers and elsewhere, we frequently find the arguments of large companies or trusts which seek to exercise a preponderating influence in certain industries. In these arguments the attentive student of human nature will discern a note of impatience if not of anger on the part of men who were accustomed to having their own way about things, but now had come in contact with a force offering many obstacles to the accomplishment of their designs which they did not understand. Thus it would appear that a man of high integrity, brought up in a school of business where things are done in a certain regular and orderly manner, who by long control of vast business interests has become dictatorial, perhaps showing more of a dictatorial spirit than he ought to, cannot conceal the fact that he is somewhat ruffled at the cavalier manner in which he and his interests have been treated on the speculative exchanges.

This incompatibility with something which balks his well-meant desires and proceeds in such a riotously free-

and-easy manner to perplex and dash his most mature counsels, results in irritation; it brings clearly to his vision the gambling features of the exchanges, and helps to rivet on his mind the idea that they depress the prices of agricultural products. Hence these trust managers, many of whom are excellent customers for the produce of the farmer, become enthusiastic in their advocacy of anti-option laws; and seek to sweep the speculative exchanges, so fraught with immorality, and at the same time with independence, from the face of the earth.

A producer of a commodity which is sold upon the speculative exchanges may, if he wishes, place his crop in a car and ship it to the nearest market to be sold by sample upon the floor of the exchange; or he may put it in store and deliver the warehouse receipt in execution of a future contract. But he is not obliged to take the trouble of shipping to the exchange market in order to get the benefit of its facilities. The value of the product at his station bears a certain relation to its price at the central market; he has as good access as his local dealer to the exchange quotations, and can detect any tendency to conceal conditions or take advantage in any way. He has these quotations always before him, showing on what basis large transactions are conducted in the centres of trade, and is fortified by custom in asking that even his small transaction be given the same consideration as that of the larger producer or dealer. So well are these facts appreciated that wheat, cotton, and other products which are dealt in on the speculative exchanges are favorite commodities for production by the farmer or planter.

Those commodities which are not dealt in for future delivery upon the exchanges, however, have not these advantages, although of course there are limits to the length to which controlling interests may go. For instance, the beet-sugar factory could not afford to do business on the basis of an utterly unfair price for beets, because such a

course would only result in the farmer abandoning the culture of that product in ensuing seasons. Nevertheless, in the case of commodities not dealt in on the exchanges, the buyer for the large company may on occasion show great independence; and, if careful to select the time, may so conduct his buying that the company will get the benefit of any surplus which might develop in particular seasons.

Some lands are especially adapted to tobacco, to sugar cane, or some other particular crop; and the grower will endure at times unfair exactions rather than abandon the culture of his accustomed specialty. Tobacco, for instance, is a crop which is not made the subject of active speculation upon the exchanges, and there are no quotations for futures to guide the planter in disposing of his crop, and no organized market to which he could send it in case he could not get a fair offer from the local buyer. Hence some description of the manner in which tobacco is bought may throw light on the question of trust control as an alternative to the dominance of a market furnished by organized speculation. The following excerpts from Congressional hearings contain the gist of much of them and describe important features of the customs prevailing in the tobacco trade as to buying the commodity: —

"It has been the custom for the past four years for one buyer to come to a barn and make one bid on that tobacco, and, generally speaking, he does not come any more. He comes and says, 'I will give you $4\frac{1}{2}$c,' or, 'I will give you three and one,' or 'I will give you something else'; and it is that or nothing. Most frequently we will not have another opportunity of selling." [1]

The buyer "came to my house and made me an offer for my tobacco, and I knew that I had to sell, for there was no other way in the world to sell it, no other recourse, and I

[1] Statement of F. G. Ewing before a subcommittee of the Finance Committee of the United States Senate, *Sen. Doc.* No. 372, 2d Sess., 59th Cong., p. 54.

sold it to him. He was on his way to one of my neighbors. We had telephones in the house, and I telephoned to my neighbor before this buyer got to his house, and told him that he had better take the first offer; that unless he did, he would knock him down. The neighbor could not take the offer that day, because his share hands and tenants were not convenient, and he could not take the liberty of selling their tobacco without their consent and authority. So the buyer said to him, 'You had better take this offer; when I come to-morrow I will give you less.' In two days from that time this neighbor went to accept the former proposition and he knocked him down a hundred dollars on a $600 crop; and, gentlemen, he kept going lower and lower until he got $250 below the first offer."[1]

When the trade in a commodity is large enough to make it pay to form some kind of a trust or combination, and where there is no speculative exchange with its open market to determine prices, we have this form of trust control. The outward appearances of the buying trusts or combinations are different, as particular trades are conducted according to their own special customs; but everywhere, under the conditions mentioned, we have a buying trust or combination to keep prices down and control the markets. Live hogs, for instance, are not traded in for future delivery upon the exchanges, and the method by which they are bought when they reach the large centres shows the same preponderating control of market conditions which has been described in the tobacco market. Oil also is an example. Where the number of buyers is few, and the commodity regularly dealt in, the expedient of making some kind of arrangement whereby bidding shall be restricted is so obvious that it is idle in such case to expect that there will be a free market.

Some day, no doubt, all these things will be reformed, and business customs and laws so changed that the buying

[1] Statement of Charles H. Fort. *Ibid.*, p. 117.

trust will not be able to secure any unfair advantage over the producer. The trusts themselves may be reformed so that the potential competition always present may be a more powerful influence, or new competition may be introduced to diminish their power. No one can prophesy as to what will be the system in actual use generations hence. But, for the present, it has been abundantly shown that the speculative exchanges, with all their faults, do introduce an important competing element into the calculations of those who would like to become monopolists, and that the general tendency of the speculative markets is toward the democratization of industry, and toward giving every man the opportunity to do business and to work up from small beginnings in his particular line of trade.

A Democratic Institution

The markets furnished by organized speculation represent the most complete development of the competitive system and of democracy in trade, as opposed to monopoly and concentration of wealth and power. Upon the exchanges, any one may deal, even though he have no extensive plant or arrangements for carrying commodities; and, if he trade rightly, he may feel assured that he is carrying a part of the great staples of commerce, and casting his influence in the direction of fixing such prices that industry may be directed to those channels in which its efficiency and its economy will be most perfectly realized. At the same time other business men outside the exchanges may rely upon the option system to protect them against business vicissitudes which would otherwise cause them to abandon the field and leave it only to monopolists or semi-monopolists.

Thus organized speculation represents freedom of action and at the same time coöperation and division of labor and of functions. It is the people working with separate wills and yet organized so completely that they accomplish cer-

tain purposes by joint action. Like a bank which gathers money from different depositors and then uses it, sometimes in large, sometimes in small amounts, to further the business development of the country, so the speculative exchanges gather the money of a number of capitalists; and, through the business system described herein, they furnish the method and the capital whereby the small dealers upon the outside are insured against certain losses and many of them enabled to continue in business on approximately equal terms with larger companies or semi-monopolies.

Such are some of the ideal aspects of organized speculation considered as an alternative to monopoly and the concentration of wealth and power. The faults that go with it are the same as those of any form of democracy or freedom. They originate, in their ultimate analysis, in the weaknesses of human nature, especially as it seems almost impossible for the average man to understand financial matters. The troubles of the speculator are such as he has entered into of his own accord; for no one is obliged to speculate. It is only when the people become so educated in finance, that they can appreciate and understandingly use a free market, that the speculative exchanges will appear in their true light as the most important enemies of monopoly and privilege of all sorts.

A Monopoly of Commissions

Notwithstanding the considerations brought forward in the last heading and the fact that they can scarcely be given too much emphasis, there is one direction in which they should be qualified. The cosmopolitan character of the exchanges and the freedom and independence which they promote among their members all tend toward breadth of vision. Hence, as a class, the members of exchanges are broad-minded men. Yet they are not always free from that narrow spirit which prevails outside; and, when the brokers have in mind the question of commissions, they are anxious

to exclude all those except their immediate associates from participation in business opportunities. No labor union, no trust, no monopoly or attempted monopoly can be more jealous of prerogatives than are the members of exchanges in regard to commissions.

The important exchanges usually have commission rules which carefully prescribe the minimum charges on each class of business, and against those who appear as competitors the boycott is rigorously applied. Exchanges furnish their quotations to similar institutions located so far away that they cannot be competitors and to exchanges which deal in non-competing lines, but not to actual competitors; and benefits that might accrue to the commercial world from their organization are carefully held back wherever possible if it appear that any share of the profits is in danger.[1]

It should be noted, however, that this policy is not concerned with the function of exchanges as regulators and directors of commerce, in which capacity their influence always makes for independence and against monopoly, but only with the compensation that brokers charge for their services. It may further be stated that these commissions are unimportant compared with the other business interests involved; that they are small compared with commissions outside the exchanges; and that the spirit which is shown is no different from that displayed by business men in other lines.

Real Gambling

Considering now the effect of organized speculation upon the individual and the admitted evils and sorrows to which the speculator of the usual type is subjected, the question

[1] For a description of the methods used by the New York Stock Exchange against its neighbor the Consolidated Stock and Petroleum Exchange, cf. testimony before the Pujo Committee investigating the "Money Trust," June 12, 1912.

naturally arises as to whether there is no alternative in the individual case. Might not the unsuccessful speculator be taken from the exchanges and put to work at some calling to which he is adapted, thus leaving the speculative markets in control of those professional operators who understand technical conditions and who would thus promote the welfare of the people by their trading?

In most cases the answer must be in the negative. The misguided unsuccessful speculators are not those who have entirely mistaken their calling. They are the ones who would naturally take the legitimate risks of the community and who are stepping forward to perform their intended function. The difficulty is that they have not the ability, the industry, the training, or the capital, to undertake those risks in the most effective manner. They are like many of our unsuccessful lawyers, doctors, merchants, farmers, or manufacturers. They are attracted toward the callings for which they are most nearly fitted; but, owing to defects, they do not meet with success. This evil of amateurism is further aggravated by the fact that, at the present stage of human development, there are very few persons born who can cope with conditions in the speculative markets, while at the same time the fascinating nature of the speculator's ideal makes the number of those seeking his rewards even greater than in other fields of endeavor. But these thousands of persons, driven on by their natural propensity to take risks, and this propensity further intensified and made abnormal by various conditions, must have some way of gratifying their desires; and the desires of the natural risk-taker, when inhibited or perverted, frequently become the passion of the gambler.

If the markets of the world are closed to the speculator, he will seek that excitement which he craves in real gambling. There are abundant facilities at hand whereby he can gratify his perverted instincts; for, as rapidly as one form of gambling is stopped by law or passes out of

fashion, another is invented to take its place. There are the race-track, the hand-book, policy, and all the numerous forms which alternate with one another in popular favor. They have no redeeming features. They not only lend themselves to satisfy the gambling passions of the very poor, but work their way into every crack and corner of the social fabric.

Speculations upon the exchanges, however, even when taken at their worst, have their services in the world of commerce, and do not as readily present themselves to the poor, for they require in most cases larger sums of money than are necessary in games of chance. The broker's office is not a place where a man of small means would naturally feel at home; and the knowledge that there are places where one may speculate upon the rise and fall of securities and commodities is not so widely diffused as is the case in regard to games of chance. Further, the circumstances which urge on the gambler carry him to greater extremes than in the case of the speculator. The exchange hours are short and are usually in the daytime. The systematic use of alcohol to urge on the speculator is comparatively infrequent. Games of chance, too, may be undertaken even without any gambling-house or extensive apparatus: but two persons in the mood, and a few of the simplest tools are all that is necessary.

Furthermore, there is use in speculation, while there is none in games of chance. Let us take organized speculation at its very worst, and admit that most of the deals made upon the speculative exchanges are mere adventures by irresponsible parties filled with the gambling instinct. Yet there are legitimate transactions as well; and even the haphazard dealings of the amateur speculators, which do so much injury to the community in every way, have redeeming features and accomplish some good, all of which is discussed under the head of "hedging," and in other parts of this essay.

Thus, in considering the matter as a question of alternatives, it is seen that organized speculation cannot be carried to the length that gambling can in oppressing the poor and demoralizing the individual; and even when taken at its worst, organized speculation is of important indirect use to the commercial world, while gambling is of no use. When gambling is abolished, it will be time to consider the question of whether it be really expedient to stop speculation upon the exchanges. While such an alternative as that of gambling exists, reformers and purists might better devote their energies to abolishing it, rather than weaken their case by attacking something which has many strong points in its favor.

Unorganized Speculation

But gambling is not the only alternative which may be offered for organized speculation. If the exchanges were closed, many who now resort to them would doubtless continue in speculation, but it would be of the unorganized type. Speculations could be carried on in the very commodities now dealt in upon the exchanges, but the special facilities would be absent. As shown heretofore, such dealings would be much restricted compared with those which now exist; and they would be made in a market where bear speculation would be almost impossible.

The restricted form, furthermore, is free from many of the evils which attend organized speculation. Probably it can be said with perfect fairness that unorganized speculation is less like gambling than the organized kind; and many persons who regard organized speculation with horror have no objection to speculative dealing outside of the exchanges.

Unorganized speculation lends itself even in lesser degree than the organized kind to those who have but small capital and who wish for rapid action. The method of transferring commodities is cumbersome; and the speculator

cannot ruin himself so quickly as in the case of organized speculation, since he necessarily has more time for reflection before undertaking a deal. Furthermore, the scalping which prevails upon the speculative exchanges, and gives dealings thereon a strong resemblance to gambling, is absent in the case of unorganized speculation.

The important feature lacking in the case of unorganized speculation is a continuous market in which the speculator can unload in case he changes his mind. In real estate dealings, this absence of a continuous market is keenly felt. The market for real estate in a particular city may be advancing rapidly, and the speculators with accumulated profits may be buying everything that is offered. But suddenly the change comes and the market is demoralized, the speculator finding himself with a piece of real estate upon his hands with no demand and a heavy mortgage. Then follows the slow, blood-sucking process by which he is tied down, perhaps, for the remainder of his life, with the continued round of interest, taxes, insurance, and other expenses.

The writer holds no brief for the system of trading as it exists upon the exchanges, but in one respect at least it causes less social and moral injury to the community than unorganized speculation. For, if at any time, a speculator upon the organized markets wishes to shake off the gambling spell and discontinue speculation, he can readily do so. He may order his deals closed, or his broker will do that anyway if his margin be exhausted; and he will thus be free to quit speculation if he wishes and engage in any other kind of business. But the speculator in a market which is not continuous may be drawn on for life in the most hopeless grind. He finds himself with unsalable property on his hands, which is usually mortgaged; and, in giving the mortgage, the speculator has given his note. Hence, unless he defaults on his note, he is bound to keep on paying interest on a debt that is much beyond his resources.

It has been the peculiar fortune of the writer to be associated all his life with different speculators — those who speculate upon the exchanges and those who speculate in real estate where there is no organization. He has seen in most cases nothing but losses and misery come to either kind of speculator. But the greatest misery and loss — the largest number of ruined lives that he has seen — have come from the unorganized, not from the organized, kind of speculation.

Speculative Business

It is difficult to draw the line as to where speculation leaves off and other trading or business begins. Any risks taken in a business way are considered by many persons as speculation. But it seems better to confine the term in its strict sense to the taking advantage of fluctuations in the prices of property, and to use the term speculative business to designate commercial undertakings in which there are great hazards, of a general nature. This kind of business may be considered as an alternative to organized speculation.

We must consider human nature as it is, not as it is supposed to be. If there were not the facilities of the organized exchanges whereby the business men of a speculative or gambling turn of mind could gratify their propensities, they would, many of them, seek some sort of speculative venture in the line of their own business. This, in many cases, would be the best alternative offered; for, if a person be dominated with the common passion for risk-taking, his recklessness would not be as likely to lead him to ruin in the case of a business which he knows as in one of which he knows nothing. Nevertheless, the risks of business are so great that, even in one's particular line, there is danger of over-extension. There is an infatuation in the business which one has selected as a young man and followed in succeeding years. When the mind is narrowed to a parti-

cular vocation, the world's different commercial interests are seen in a distorted perspective; and one is likely to estimate his previous successes too highly, and to place too great a reliance on his abilities and his resources.

A business man once said to the writer, that, whenever a merchant extended his business, it was well to be suspicious of his credit. The remark was of course an exaggerated one, and was intended as sarcasm or humor rather than an actual working rule in granting credits; but it contains the germ of truth which is only confirmed by its humor. There have been so many cases of failure shortly after business extension that it would seem well worth the while of a credit man at least to make an investigation in such a case.

In truth all business is risky, as is seen in the statistics of failures; and any one may note from the experience of his friends and acquaintances the great risks which all business houses run. Some of the most glaring weaknesses in human nature are shown in the conduct of businesses which are regular and legitimate in every way. After a successful season the natural optimism and egotism, which exist to a greater or less degree in all of us, may, for the moment, unbalance the judgment of even the most level-headed; and at such a time the arguments for extension appear especially plausible. Money has been made by a particular form of business operation; and what course could be wiser, it is naturally argued, than to extend the plant and facilities along the same lines which have proved so successful? Furthermore, since the profit of the business is much larger than the current interest for borrowing money, why not borrow enough to extend operations and do business on a large scale and so make increased profits? But alas, such reasoning as the above has led to more suicides and more failures than even the speculative markets. The present season may not be like the last one. Hard times are always alternating with prosperity, and general conditions which the

business man cannot control are likely to result in disaster; while the constant shifting of commercial centres and of profitable lines of trade render all calculations extremely uncertain.

But speculative business is not seen at its worst in the cases where the merchant or manufacturer extends his own business. The seductive glory of posing as a local capitalist and of spreading into different fields is even more dangerous in its allurements. Hope characterizes the organizer of any business, whether he be a promoter selling stock in some large and distant enterprise, or a business man seeking to interest his neighbors in a local venture or investment.

Many a man who has done well in the business which he learned in his youth has put his surplus into some form of speculative business, and, as a result, has lost all that he had. At the time when some outside venture of this sort is contemplated, the situation seems safe enough. Even a conservative man may reason that in his present business he has something which is always safe and profitable, and it may appear to him that it is only his surplus which he is risking in the proposed enterprise where there is the possibility of the large profits such as he has heard are made by men of great originality and force in venturesome enterprises.

But the kind of reasoning referred to is dangerous in the extreme, for the new enterprise is quite likely to require more capital than was contemplated. It being of a speculative or venturesome nature, some of those who agreed to go into it may change their minds; and those who have already put in enough to start it may feel that they must see it through in order to save what has already been put in. Hence we find that a man who has been enticed into such a venture may draw on his old and established business to get further funds, until finally both business enterprises show debts and losses, and the erstwhile conservative and

comfortable merchant or manufacturer is obliged to go into bankruptcy.

If it be intended to enter into any form of speculative venture, it is believed that it is better to resort directly to margin transactions upon a commercial exchange than to enter into speculative business. Or, as has been shown in a previous section, if the business man will be careful enough to purchase his stocks outright, or at least to have a large margin, he will find that the speculative exchanges offer a field in which he can so invest his surplus that it will, in most cases, serve as a second line of defense; as a help to him, not a burden, in case of business reverses.

To sum up; speculative business is a good alternative to organized speculation in many cases, inasmuch as most men know their own business better than any form of outside speculation or investment. But business men often overestimate their own powers, and hence make the great mistake of extending their business by going into debt in order to make such extension, or of entering into reckless outside business ventures. If speculation upon small margins in the haphazard gambling spirit could only be eliminated, the surplus of the business man could best be invested in the speculative markets under the advice of an expert; for organized speculation if properly conducted, is safer than speculative business.

Evasion

The discussion of alternatives to organized speculation has been entered into with a view to showing its actual value to the community by imagining the conditions that would most likely exist were it suddenly destroyed. Looking at the question from a practical standpoint, however, there is no alternative. The only effect of a law abolishing it would be to restrict its operations. Let us suppose, for instance, a law to be enacted with a prohibitive tax upon short selling. Such a law if enforced would mean the abolition of an

essential feature of organized speculation; and, to those who believe that an institution can thus be destroyed, would appear final.

But that belief is a most deceptive one. To find illustrations we do not need to confine ourselves to this country, with the power in its courts to declare null and void any act of the legislature which they may deem contrary to the constitution; but, to take restriction at its best, we can refer even to Germany — a country where laws are strictly enforced, and in which, so it happens, measures of a similar character have been enacted.

The German anti-bourse law of 1896 not only had the government behind it, but it was backed by public opinion, especially by the agrarians and others of power and influence. Yet the law was evaded, and had an effect very different from what its supporters had intended. Some of the forms of evasion which the Germans found effective are dependent upon their peculiar customs, — for instance, upon the fact that the banks in Germany play a larger part than they do here in the buying and selling of securities. Therefore no attempt will be made to describe the special customs of which the Germans availed themselves in picking out particular features of the law to evade. We in this country could not use all of these methods; but the Americans could be depended upon to invent new and interesting schemes of evasion that would be even more effective than those which the Germans adopted.

Furthermore, when other methods appear too cumbersome or difficult, there would remain at least the favorite method by which the Germans evaded their anti-bourse law; namely, that of trading in a foreign exchange. The Germans used Amsterdam, Paris, London, and other foreign markets. In this country, if we had an anti-option law, and if some attempt should be made to enforce it, the grain speculator would substitute Toronto or Winnipeg on the letter or telegram, while the speculator in stocks or

cotton would use the Canadian or English exchanges, with a possible resort to the Continental bourses.

The workings of the law in Germany served to inhibit the best features of organized speculation rather than the worst ones. The speculative adventurer found little inconvenience in telegraphing his orders abroad or resorting to other means of evasion; while, in the decade following the enactment of the law, that country appears to have entered into a period of speculative business and gambling excitement which was much more unsound than that of any other European country at the time.

The good which is accomplished by organized speculation in the way of furnishing opportunities for hedging was interfered with; and the absence of regular quotations for German grain, while it by no means brought trade to a standstill, was nevertheless an inconvenience. The evasion of the law was so general, and the dissatisfaction with its workings was so widespread, that it was amended in 1908 and its radical provisions repealed.

Possibly the attempt of this country to prohibit what was called trading in gold in 1864 may be referred to as an example of a repressive law of this sort which was enforced; for it is generally conceded that, during the brief time the law was on the statute-books, there was little trading in gold. But the circumstances which surround the case are such that the instance proves nothing.

During the Civil War the promises of the Government were circulated as money. Their value depreciated as compared with the standard, and they became the object of speculation. Through motives supposedly patriotic the speculation was conducted on the assumption that the value of the greenbacks was constant and that the standard itself was fluctuating. Hence the speculation was nominally in gold, and when the greenbacks fell in value, it was said that "gold" was going up. In order to check this decline in the Government's promises as measured by an

assumed rise in "gold," a law was enacted prohibiting that form of speculation. The law was put in operation on the 21st of June, 1864; but it caused such an "advance" in the value of "gold" (really a decline in the value of greenbacks) that the law was almost immediately repealed, the bill for the repeal being signed by the President on July 2.

The law was enacted after little debate in the midst of a war in which the life of the nation was involved. Its enactment was so sudden and it was repealed so soon afterwards that there was not time to organize a system of evasion; and in no other country was there an exchange where a speculator could trade on the comparative value of gold and of the promises to pay of the United States Government.

Reforms in Method

There will always be some form of organized speculation and that form must retain short selling and other essential features. This is seen in the fact that organized speculation has come about as a voluntary development and that it performs a useful function. It is childish to attempt to base a commercial society upon Utopian dreams. He who would influence human actions must take institutions that he finds at hand and mould them to suit his purposes. It would be futile for the reformer to attempt actually to create an institution or to annihilate one. He might as well attempt to create or destroy physical matter. The only practicable alternative for organized speculation as it exists is so to reform it that it will exercise that function for which it appears to be fitted.

Organized speculation is perverted when an attempt is made to use it as a means of gambling or to further any form of injustice. It would not be tolerated for a moment if it were not for the fact that there are those who use it for legitimate commercial purposes; and the number and importance of those who so use it must be increased. At

present any gambler may enter the speculative exchanges and in the gambling spirit make trades which to him have all the evil effects of gambling. How to frame a law so as to accomplish the desired reform is one of the most delicate problems of statesmanship. The reforming of organized speculation should be the concern, not so much of legislatures as of our commercial statesmen within the exchanges, whose interest it is to see that the methods of these exchanges are in accordance with the best business standards.

In England, in 1877, a Royal Commission was appointed to inquire into the constitution and customs of the London Stock Exchange. The investigation that resulted was a thorough one; many witnesses were heard, and in 1878 the report was issued. Numerous recommendations were made in this report, and, while several of them were willingly adopted by the exchange, others did not result in any action either by the Government or the exchange. The abuses complained of, however, have their recent prototypes, and the problems can better be studied with reference to present American conditions.

At a later date the Imperial Government of Germany appointed a commission, somewhat similar to the English one, to investigate the workings of the exchanges and suggest reforms. In November 1893 the labors of the commission were concluded and its report issued. Although the recommendations were conservative and recognized the usefulness of a properly conducted exchange, the Reichstag did not confine itself to the measures recommended in the report, but enacted the radical law of 1896, previously mentioned.

After the panic of 1907 in this country, Governor Hughes of New York appointed a committee to investigate "what changes, if any, are advisable in the laws of the state bearing upon speculation in securities and commodities, or relating to the protection of investors, or with regard to the instrumentalities and organizations used in dealing in se-

curities and commodities which are the subject of speculation." The committee, after numerous hearings, reported on June 7, 1909.

This report, like those in Germany and England, is a conservative one, and it has resulted in several reforms in the method of conducting speculative business upon the New York Stock Exchange and elsewhere. Its recommendations being recent, and covering a wide field, will be considered under the appropriate headings.

Exchanges that are not Exchanges

It is significant that when reformers seek to point out the evils of exchange trading, they begin with institutions that are not exchanges in a strict and proper sense. There are counterfeit markets which are given the form of exchanges merely for the purpose of deceiving the public. The reason why those who would thus defraud give their schemes the form of organized speculation is because they know that the public (notwithstanding its frequent criticism) has much confidence in the free market furnished by the exchanges.

In the battle with the bucket shops the officers of the law frequently found that a bucket shop, instead of masking as a broker's office, would pretend that it was in itself an exchange, and that quotations for stocks were actually made within its walls. The elaborateness with which the machinery of an exchange was counterfeited and the care with which the proprietors of the place acted their parts was most curious.

In order that the so-called trading might be carried on in the name of something that was not purely the product of imagination, an unsuccessful mine which had been duly incorporated would be purchased by the proprietors of the bucket shop and dummy officers installed, who would be ready to issue the share certificates to any one who wished to buy and pay for the stock. But of course no one desired

to make an actual purchase of a stock which had no value. The reason for acquiring the corporation was to use its stock as a basis for fictitious quotations which were to be issued for gambling purposes.

All the forms of an exchange were carefully simulated. Some of the employees of the proprietor were designated as "brokers," and went about among the so-called "traders" in the room soliciting orders. Every five minutes one of these "brokers" would receive by wire an alleged order to buy one of the stocks. He would bid for it the same as a real broker, and another of the "brokers" would pretend to sell it to him. The "quotation" would go upon the blackboard, and would be sent out to other bucket shops by a special ticker service and form the basis of a considerable amount of "trading." This manner of conducting a counterfeit exchange was called "working the tape game." The instance is mentioned merely to show the lengths to which gamblers will go in order to make a counterfeit appear like a real exchange.[1]

But the fraudulent use of the name exchange is not confined to giving a cloak to gambling operations. There are exchanges, so called, which exist for the purpose of establishing a market price at which owners of property are induced to sell. For instance, the committee appointed by Governor Hughes, in describing the Mercantile Exchange in New York as it existed at the time the report was made, used the following language: "The published quotations are made by a committee, the membership of which is changed periodically. That committee is actually a close corporation of the buyers of butter and eggs, and the prices really represent their views as to the rates at which the trade generally should be ready to buy from the farmers and country dealers."[2]

[1] Cf. Hill, *Gold Bricks of Speculation*, chap. VI.

[2] *Report of Governor Hughes's Committee on Speculation in Securities and Commodities*, p. 21.

Similarly, in describing the method of conducting the Metal Exchange, the committee has this to say: "In spite of the apparent activity of dealings in this organization in published market reports, there are no actual sales on the floor of the Metal Exchange, and we are assured that there have been none for several years. Prices are, however, manipulated up and down by a quotation committee of three, chosen annually, who represent the great metal-selling agencies as their interest may appear, affording facilities for fixing prices on large contracts, mainly for the profit of a small clique, embracing, however, some of the largest interests in the metal trade." [1]

The committee recommended that the charters of these exchanges be revoked, but, on account of the publicity afforded by the committee's report, the officers and members have taken measures to eliminate clique control and to make their exchanges true markets.

As heretofore explained, all transactions not made during the regular session of the exchange in the exchange hall are called curb trades. The tendency is, however, when curb trading becomes important, for the particular commodities or securities so traded in to be admitted for trading in some exchange or for a new exchange to be organized for their benefit. The securities which have not been listed for trading on the New York Stock Exchange would naturally develop an exchange on which trading in them could be conducted. But the formal organization of such an exchange is prevented by the fact that it is principally through members of the New York Stock Exchange that trading in these outside securities is conducted, and that the constitution of the exchange prohibits its members from engaging in transactions on any other organized stock exchange in New York.

These conditions have resulted in an open-air market, which is held on Broad Street during stock exchange hours.

[1] *Report of Governor Hughes's Committee*, p. 21.

Those who trade in this curb market have no formal organization, yet all tacitly concur in certain rules and customs, observance of which gives the appearance in some respects of an exchange. But the public associate any trading in stocks, especially that transacted by stock exchange members, with the exchange itself, and, when scandal results, the whole system of organized speculation is condemned. The Hughes Committee, apparently recognizing that there is some point in this attitude of the public, recommended rules for the regulation of business upon the curb and particularly for the admission of securities to quotation. Such rules could be readily enforced in view of the fact that a large proportion of the traders on the curb are stock exchange members who could be controlled by rules of the exchange.[1]

The fact that something similar to an exchange will arise, even in cases in which the traders are seeking to avoid the appearances of one, and the fact that the committee in seeking reforms recommends a closer approximation to an exchange, are excellent illustrations of the value and services of organized speculation.

When circumstances are such that there is need for a commercial exchange, one must be created, even if the form adopted be of a perverted or crippled character as in the examples just given. The reformer should bend his energies to change the laws and customs of the exchanges so that any perverted forms of exchange trading that may appear will be made to assume the character of true organized speculation.

Eliminating Uncommercial Practices

As heretofore explained, the introduction of the speculative element into a market and the organization of speculation upon an exchange are the best guarantees that can be had at the present time against monopoly or the

[1] *Report of Governor Hughes's Committee*, p. 14. *Cf. infra*, p. 262.

domination of a clique. Yet the speculative markets are by no means clear of manipulation; and the freedom of organized speculation, with its ready responsiveness to every gust or eddy of price movements shown in the great number of minor fluctuations, gives facility for rapid manipulations for small turns. But the machinery of an exchange, with its discipline, its organization, and its publicity, renders it possible to reform practices which would be irremediable outside. And the Hughes Committee was able to point out legislative measures and changes in the rules of the exchanges which would accomplish the reforms that they advocated.

The committee favored an even greater degree of publicity than that which now exists. The books and accounts of the members should be subjected to periodic examination and inspection, pursuant to rules and regulations to be prescribed by the exchange.[1]

The filing of frequent statements of the financial condition of companies whose securities are listed on the exchange is recommended.[2] But it was thought that the attempted verification of the statements of fact contained in the papers filed with the application for listing would give the securities a standing in the eyes of the public which would not in all cases be justified.

It is sought to deprive the manipulator of the fruits of his manipulations by providing a special rule against corners, whereby the governors of the stock exchange shall have power to decide when a corner exists and to fix a settlement price, so as to relieve innocent persons from the injury or ruin which compliance with the present rules would involve.[3]

Various measures are suggested looking toward the suppression of bucket shops. The exchange should have greater control of the ticker service; for it is on the con-

[1] *Report of Governor Hughes's Committee*, p. 8.
[2] *Ibid.*, p. 9. [3] *Ibid.*, p. 8.

tinuous quotations that the bucket shop principally depends. The passage of a law is recommended providing that, in so far as the transmission of continuous quotations is concerned, telegraph companies shall not be deemed common carriers, or be compelled against their wishes to transmit such quotations to any person, and that if a telegraph company has reasonable ground for believing it is supplying quotations to a bucket shop it shall be criminally liable equally with the keeper of the bucket shop. Tickers carrying quotations are to be licensed and bear a plate, whereon must appear the name of the corporation firm or individual furnishing the service or installing the ticker, and a license number. Telegraph companies buying or transmitting quotations from the exchanges shall be required to publish semi-annually the names of all subscribers to the service furnished, and the number and location of the tickers, in a newspaper of general circulation published in the city or town in which such tickers are installed. Measures should also be taken to control the direct wire service.[1]

Bucket-shopping within the exchange should also be severely dealt with, says the committee, and adequate penalties provided in case a trade be not actually executed.[2] Specialists and others should not be allowed to buy and sell for their own account while acting as brokers,[3] and brokers should be required to furnish in all cases the names of brokers from whom shares were bought and to whom they were sold.[4] Clearing-house sheets which record the transactions of an exchange, such as it was the custom at the New York Stock Exchange to keep on file for only a week, should be preserved at least six years.[5]

Strict regard for the property of a client which comes into the hands of his broker should at all times be insisted upon; and brokers should not lend securities that come into

[1] *Report of Governor Hughes's Committee*, p. 17.
[2] *Ibid.*, p. 9.
[3] *Ibid.*, p. 10.
[4] *Ibid.*, p. 16.
[5] *Ibid.*, p. 10.

their hands or re-hypothecate them except in compliance with the wishes of the owner or the customs of the exchanges. It is recommended that when a broker sells securities purchased for a customer who has paid for them in whole or in part, except upon the customer's default, or disposes of them for his own benefit, he shall be held guilty of larceny.[1]

The idea of the broker and of his clerks being placed in the position of trustees for the business and property of clients is important in the consideration of all reforms. Many brokers at present, in order that they may give their undivided attention to the interests of their clients, are careful to pursue the policy of not speculating at all for their own account. The New York Stock Exchange has a rule forbidding any member to carry an account for a clerk or employee of any other member. The committee recommended an extension of this rule so as to prevent dealing for the account of any clerk or subordinate employee of any bank, trust company, insurance company, or other moneyed corporation or banker.[2]

Another important recommendation of the committee relates to the unit of trading. At the time the committee made its report, the rules of the New York Stock Exchange permitted bids and offers for large amounts of stock all or none. A trader, for instance, with the intention of manipulating the market might bid for, say 1000 shares of stock at, say 110 all or none. By thus bidding for a large amount there would be comparatively little chance of any one accepting the proposition; and a trader who might wish to sell, say 100 shares, might offer it at, say 109, with no takers. The requirement that the bidder in such case take all the shares offered at the lower price before bidding for the larger block at the higher price would tend to prevent matched orders.[3]

[1] *Report of Governor Hughes's Committee*, p. 9.
[2] *Ibid.*
[3] *Ibid.*, p. 10.

Eliminating Amateurism

It is not, however, by directly making the attempt to eliminate the various forms of uncommmercial practices upon the exchanges that the most fruitful field for the reforming of organized speculation is to be found. If we wish to propose as an alternative a reformed system, we should go to the root of the evil and find on whom it is that the manipulator must prey. The evils of organized speculation centre about the vast mass of amateur speculators whose operations constitute such a large proportion of the trading; while the reckless manner in which these amateurs risk their money supplies the temptation which causes the market leaders to resort to manipulation and the other discreditable tactics.

Organized speculation suffers from amateurism as does no other trade or profession. Among doctors and lawyers, for instance, there is an examination and a test of fitness before one is permitted to practice. In speculation such a test is, of course, impracticable, because there is as yet no generally recognized science of speculation, and no treatises which describe in detail the movements of the market. Such a science is beginning to emerge from the more comprehensive science of economics, but only the beginning has been made.

It was with a view to excluding the unskilled and those who do not possess the proper equipment of capital that the German law of 1896 provided for the registration of speculators. The law even went to the length of declaring that contracts made for future delivery upon the German exchanges were not enforcible at law unless both parties to a transaction were registered. The registry, however, was unpopular. Persons occupying positions of trust and others whom it was desirable to exclude from the speculative markets refused to register, but that fact did not deter them from the speculating. Brokers were readily

found who would execute their orders upon the strength of their word or the giving of security. There were many cases in which unregistered traders refused to pay losses, but the results hoped for from this provision of the law were not realized. Instead of discouraging illegitimate speculation, it only encouraged fraud, perjury, and evasion.

Unless we can discover some method of selecting desirable speculators for license and excluding those who are undesirable, the licensing system must prove a failure. It is also necessary always to keep in mind the fact that, if we go too far in making organized speculation difficult, the restrictive measures will have much the same effect as an attempt to abolish entirely the speculative markets. The former traders will seek real gambling, unorganized speculation, or speculative business to gratify their love of excitement. The elemental passions in human nature cannot be held back forcibly. All that can be done is to afford every facility for the play of the better forces.

Another method of eliminating amateurism is by discouraging the small transactions. It is, indeed, true that most of those who lose money upon the exchanges are poor, or speedily become so after they have speculated; and no doubt the small speculator is usually less able to give an intelligent reason for his operations than a large trader. Hence, to eliminate these small speculators would seem to afford a promising opportunity for reform. This policy is called "killing the little business" and consists of shutting off private wire connections in small cities and elsewhere, in keeping some of the smaller exchanges from getting the quotations of the larger ones, and in excluding privilege trading on the theory that the smaller traders would thereby be deterred from speculating.

If we consider only the present, it might appear that this policy would lead to a real reform. Doubtless many of the perverted uses of the exchanges would be done away with. But to one who believes that the reformer should always

keep in mind the great services in the world of commerce which a properly conducted system of organized speculation may perform, it would not seem wise thus roughly to push aside the class of smaller traders. If the people are to be really educated to use the exchanges for their proper purpose, they should learn that any speculator, even though he may be poor, should have a chance to grow up in his business by diligence and saving. We provide education at a small price for our professional men in the hope that thereby talents which might not otherwise be developed may be availed of. Speculators need skill more than any other form of equipment. If a speculator have real talent for his selected calling, he may be able, even though he begin in a small way, quickly to cut an important figure in the market.

By inducing the speculator to use caution in his dealings and thus, if possible, preventing him from exposing his capital to the mercy of any gust or eddy in the speculative markets, we have a method of reform quite different from that just discussed and more promising of favorable results. Indeed, there is a way in which the speculator can almost be compelled to exercise caution in a direction in which caution is greatly to be desired. Margin transactions, it is true, are essential to exchange trading the same as in the case of any other business. But there is a tendency in any business for the equity which the business man holds over and above the debts that he owes, or in other words his margin, to become too small. This is especially noticeable in the case of exchange trading, as the margins in that business have sometimes almost reached the vanishing point or disappeared altogether. But by the action of the rules of the exchange, a trader may be required to adapt the size of his trades to the size of his margin and thus be compelled to exercise a reasonable degree of caution. The person with small capital should not undertake commercial enterprises except on a moderate scale; and speculation is the form of

business in which the danger of attempting to work on insufficient capital is greatest.

The reform suggested is practicable because such a measure would have the support of brokers. They desire large margins; for, if the client does not furnish good security in this way, his account is likely to become exhausted, thus making it necessary to close it, with possible loss to themselves. They also desire it because a client who speculates on large margins has a greater chance of success; and, in case a broker had a number of such customers, he would not have to be continually seeking a new clientele to take the place of those speculators who had lost all in previous deals. Hence brokers would look on such a requirement as an excellent excuse to enable them to insist on getting that which they all the time desired. A properly qualified speculator would not be deterred from speculating by such a rule as that just suggested. His chances of success would merely be increased by his being compelled to use more caution.

In pyramiding, the speculator uses his accrued profits on a deal as a margin for further deals, and such a pyramid, to carry the figure out consistently, rests upon its apex. It is only a question of time before the market will have a reaction, causing the broker to close out the pyramid of deals at a loss. A pyramid is made by either a chronic bull or a bear, who can only see one side of a market and who thus serves to negative to a great extent the services which organized speculation undoubtedly performs. The Hughes Committee recommended very properly larger margins for single trades and for pyramids.[1] Rules of the exchanges carrying this recommendation into effect would constitute one of the most important measures that could be adopted in the direction of eliminating the worst features of amateurism from the exchanges.

Looking at this subdivision of the subject from a slightly

[1] *Report of Governor Hughes's Committee*, p. 6.

different angle, it would appear that the reformer should not merely refrain from discouraging the trading in small lots, but he should positively encourage such trading. The stock exchange is the principal place at which the shares of corporations controlling the important industries of the country are traded in. If its rules and customs could be so altered as to encourage the distribution of stocks among the people, an important public service would be rendered. Surely nothing would spread prosperity more widely than the ownership of corporation securities by the people generally, so that dividends and interest would go to the persons who now receive only wages.

It is to be regretted that the rules and customs of the stock exchange have not in general favored this wide distribution of securities. If a trader wished to buy a share of stock on time, he has usually had offered him, not the installment plan which encourages small payments from earnings with a view to ultimate proprietorship, but the margin plan, which, on the contrary, encourages reckless borrowing under the delusive hope of quick profits from unsound methods of speculation and investment. The fact that margin trading was usually restricted to one hundred share lots has been another cause for over-trading; as a speculator, in order to buy the required large number of shares, was obliged to reduce the proportionate size of his margin. Thus the very evil which is the cause of great loss to speculators has been fostered rather than frowned upon.

It is true that any one may buy as small an amount as one share of stock if he pay for it in full; and many have availed themselves of the privilege. As a result there are many investors in the stocks of our great corporations; and there are not lacking financial writers who have compiled statistics of the size of holdings and have discovered that in a nation of nearly a hundred millions there are thousands of small investors in its industries. But, in comparison with the professional men and laborers in the country,

the number of stockholders is small, and enormous holdings still exist in the hands of a few.

The manner in which the stock exchange could help in this matter would be by giving encouragement to its members to develop that department of their business which is concerned with trading in what are called "odd lots" or small lots of stock. In order to provide for the development of this kind of business, the excellent suggestion has been made that the brokers would naturally seek it if they were fortified by the rules of the exchange and by custom in charging what the service is worth. At present there is usually no difference between the rate of commission charged for trading in large and small lots. Hence a broker may buy one share of stock, get it registered in the name of a purchaser, and send it to him by registered mail, requiring postage, stationery, book-keeping, and other kinds of clerical labor besides expert advice, and yet receive for commission only twelve and a half cents.

As heretofore explained, the immense amount of speculative business upon an exchange pays the broker so well that he is enabled to work at a very small rate of commission in all departments of his business. But when a particular department is conducted at a loss, there is little incentive to develop that department. In other lines of trade small parcels of goods are charged for at a higher rate than large parcels. Why should the services of a broker be paid for on a different principle? If the broker felt at liberty to charge what the service is worth in odd-lot transactions, he could afford to push the sale of these small lots of stock by advertising and solicitation, and thus have an important influence in distributing the stock among people of moderate means. And what plan could be better adapted to develop the class of small investors than to utilize the self-interest of those specially skilled in selling stock?

There are a few brokers upon the stock exchange at the

present time who advertise that they make a specialty of dealing in stocks in odd lots and who sell them on the installment plan. Considered from the standpoint of the welfare of the people, the installment plan is injurious in cases where it encourages luxurious living in the hope of putting off the day of payment. But where it induces people to save, and especially where it diverts capital from fraudulent schemes to useful enterprises, it becomes of great utility.

The tendencies of all exchange markets are against monopoly. But the usefulness of the stock exchange could be further increased if it cast its influence in the direction of making innocuous such monopolies as do exist by distributing their ownership, or, in other words, by making every trust a people's trust. One of the most cruel wrongs inflicted upon working-people and the poor is found in the fact that swindlers are allowed to foist upon them stocks in enterprises of the most fraudulent character, while, because of the customs described above, they are kept out of touch with the experts who should be their natural advisers. Our men of light and leading in a financial way have it in their power, through the machinery provided by organized speculation, gradually to turn the people from the dishonest schemes whose stocks could not be recognized upon the exchange to the ownership of shares in the corporations which produce the staples and finer manufactures of the country.

Speculation (so the writer holds) is a practical art, which, like other arts, is best undertaken by those who are adapted to it and specialize in it. But every one who seeks interest on savings must invest them in some way, and every possible method for bringing the citizenship of the country in touch with the best investments should be carefully considered by the reformer and the philanthropist.

Besides the compulsion of such rules as those considered

and the persuasion of speculators to see their own best interests, the systematic education of those who show aptitude in the principles of speculation should constitute an important part of the reformative measures. It is only, indeed, by this means that lasting reforms can be accomplished. Speculation should be cultivated as a science and as an art; and the methods of its study and the manner in which the knowledge of it is disseminated may well engage the attention of scientists and educators.

It is the same with speculation as with any art. It cannot be fully developed by a system of mere rules and prohibitions. Take agriculture as an example. How can the poorly cultivated fields of the farmer be best brought to the required standard? So far as laws and restrictions are concerned, there is no system which can be depended upon to furnish a guide to the agriculturalist in tilling the soil. Some favor dry farming. Others advise irrigation. There are those who advise a favorite specialty, such as market gardening or fruit-growing in all cases; while others positively insist upon mixed husbandry as the only system. But these suggestions merely indicate different directions in which the farmer should be educated. He can effect but little improvement in his art from the advice and rules laid down for his benefit. Even a diligent attempt to follow a system of "don'ts" will not make an intelligent agriculturalist. The best results can be attained only when the learner has been brought to understand the underlying purpose of his art and the true relation of its different parts and subdivisions.

Speculation suffers in comparison with agriculture in that it is a newer science and the art of it is not so well developed. But it is gratifying to note that, especially within the last decade, speculation has received increased attention from students. If pursued as an art in the true scientific spirit, it affords opportunities for utilizing the most discriminating insight into economics. It is the best example

of a business in which the knowledge of underlying economic laws can be applied to practical affairs. The creation of correct public sentiment in regard to the principles involved, in short, the education of the public in the proper use of the exchanges, is the most important work of the Hughes Committee.

Summary of the Chapter

When the abolition of an institution is contemplated, the question, What is to be put in its place? should always be considered; or, in other words, what is the alternative? The critics of organized speculation habitually shirk this question; hence an examination of it becomes all the more important.

First, the proposed laws eliminating short selling were considered; but it was shown that such measures would only result in a crippled or restricted market as an alternative.

The question of monopoly was next taken up, and the importance of insurance, especially of insurance against fluctuations in prices, dwelt upon. It was shown that to the small business house such insurance is almost indispensable, that the exchanges furnish the place at which the risks of price changes can best be borne, and that they are borne by speculators of gambling or risk-taking propensities. The alternative to this system of risk-bearing is that of transferring the risk to the large companies or trusts which adopt the quite different method of guarding against risks by controlling the processes of production and the making of prices. Hence, in competition with small business houses that are not allowed to use the exchanges, the monopoly is easily able to gain the mastery and so increase its monopolistic power.

The result of the freedom afforded for the interplay of economic forces upon an exchange is a balancing of interests. Whether all the interests represented be good or bad,

the fact that they are given free rein is the best safeguard against the power of monopoly.

The question was next considered from the standpoint of the individual, and it was shown that the most likely and acceptable alternative is real gambling. But in undertaking purely gambling hazards the gambler gratifies his risk-taking propensities to no useful purpose, whereas, by speculating upon the exchanges, even considering them at their worst, he would be helping to bear the necessary risks of fluctuating values.

Unorganized speculation was next considered as an alternative, and it was shown that the demoralizing effect upon individual fortunes is greater in the case of unorganized speculation than in the organized kind. In short, the organization of speculation does not, all things considered, increase its evil effects upon the individual or upon society. Speculative business, too, offers an unsatisfactory alternative, as it has many of the evils of gambling and of unorganized speculation.

Considered from a practical standpoint, however, there is no acceptable alternative. Any law which attempts to abolish organized speculation or to remove essential features will be evaded, causing, in all probability, more injury than benefit to the commercial world.

The only alternative which would be acceptable to organized speculation as it exists to-day would be a reformed system which retained the essential features, but eliminated, so far as possible, the uncommercial practices which have such unwelcome prominence in large commercial exchanges. Institutions which have only the outward forms of exchanges should be dissolved or else made into true exchanges. Uncommercial practices and all manipulation should be discouraged or prohibited; and amateurism, the greatest cause of the evils of organized speculation, should be eliminated, even at the expense of much effort on the part of legislatures and of the exchanges themselves.

The best method to pursue in discouraging the illegitimate use of organized speculation is to encourage its legitimate use. The idea should be instilled into the minds of traders that the exchanges are places for the transaction of business, not for gambling or any form of robbery or extortion. No attempt should be made to force the amateur speculator or person of risk-taking propensities to avoid all risks, but he should be encouraged to take those which are necessary and for the good of the community, and so to educate himself in risk-taking that he will cease to be an amateur. If the adventuring traders are led to substitute the necessary risks of commerce for their reckless gambling ventures, there will remain but little to make the service of the exchanges truly ideal. Most of the other reforms suggested are but methods of accomplishing this important one. In short, it is through educating the people in the proper use of organized speculation considered as a commercial instrument that reforms can best be accomplished.

In effecting these reforms the difficulties of securing legislative action could be avoided if the better element, acting through the regularly constituted authority of the exchanges, were to pursue a consistent policy in the direction indicated. The measures taken should not proceed to startling lengths at first. It is only by gradual stages that an institution which has been perverted can be brought to its true and beneficent purpose. Speculation so organized that the transactions will be legitimate and perform a service offers the only acceptable alternative to the system of organized speculation as it exists to-day.[1]

[1] *Cf.* Postscript, p. 262.

CONCLUSION

SUMMING UP — IMPORTANT FACTS TO BE EMPHASIZED — THE FAULTS OF ORGANIZED SPECULATION AS IT EXISTS TO-DAY — ITS VALUE IN ITS IDEAL FORM

In closing, the first important fact to be emphasized is that there are grave evils connected with organized speculation as it exists to-day. This is admitted on all hands, even among the representatives of the exchanges; but the problem is not to be solved by recrimination or by exaggerated statements and abusive epithets. The members, brokers, traders, and speculators upon an exchange are not demons, and their sentiments are as altruistic as any. But when they hear their business denounced in the most unsparing terms by those who know nothing of its nature and who take no pains to become acquainted with the facts, the insult is quite naturally resented. Their anger may be pardoned; but, as a matter of policy, it would perhaps be better to admit even more than they do. They protest too much. It should be fully and frankly conceded that the great mass of transactions upon the exchanges are merely the action of unskilled adventurers who know nothing of the trend of commerce and who are seeking, in the most childish manner, to make money without work either mental or physical.

The case for organized speculation is so strong that it is not necessary to resort to any form of special pleading or to minimize any argument that an opponent may legitimately make. For if we look beyond the present repulsive aspect of the speculative exchanges and disregard the noisy shouting crowd of greedy money-grabbers, the whole process may appear in a different light. That which is repulsive is seen as merely the outward form of an import-

ant factor in commerce, as yet undeveloped; and the exchange idea is seen as the crowning one in a world of possible economic harmonies.

The true place of business among the factors of social progress is hidden from us in the same sense in which it may be said that the underlying purpose of the phenomena that a biologist observes cannot be explained or exemplified. In economics, the discussion centres about the question, who is to act in industry, and whether enterprises should be undertaken by the individual, by associations of individuals, or by the people as a whole. The world has not grown old enough, nor has a sufficient fund of experience been collected so that any observer is qualified to make dogmatic or sweeping assertions on this question. But from the mass of what has been written and said, the tentative conclusion appears to issue that action should be neither entirely social nor entirely individual in its character. The spirit of friendly, peaceful rivalry and of self-help by the individual can never be dispensed with. Neither is it possible for any man, either now or at any time, to live for himself alone. The great problem of economic science, which in one form or another is always the perplexing one, is to devise a plan whereby the world may get the full benefit of work from those who have the independence which can only come from the long exercise of the right of private initiative and at the same time the cooperation which constitutes the indispensable service of socializing labor.

There are some departments of industrial activity in which the work is best undertaken by the community acting as a whole, and in which, indeed, it would be impossible for the individuals as separate units to make progress worth while. At the same time there are other departments in which it is necessary that the individuals act separately. As for the great mass of economic activities, they fall without either of these classes; and it requires impartial study

of the conditions prevailing in each industry at particular times and places before the manner of conducting them will be apparent. The crass blundering efforts of those who would constitute some authority to dictate to individuals in regard to all matters are only equaled by the fanatical utterances of those who can see no benefit in collective action and who would destroy the organization which is naturally being effected in business.

Individuals acting for themselves with an enlightened self-interest competing side by side with voluntary associations, and each of these forms of industrial activity utilizing the factors of economic strength which naturally belong to it, is the solution of the question of a great part of the injustice that prevails to-day.

It would be without the scope of this essay to undertake to describe the manner in which these associations and individuals would be related to one another, or to indicate the possible combinations that might be formed; and such a task would be impossible of accomplishment, as no one living could understand the conditions that will exist thousands of years from now. There are indications, however, that two important existing agencies, both of which are at present imperfect, will play an important part. The commercial corporations as at present managed are the object of execration; and much of it is just. But it should be remembered that they are voluntary associations, that any one may enter them by purchasing their stock, and that they are sufficiently elastic so that persons of different degrees of ability with faculties fitted for performing different tasks, some with large and some with small amounts of capital, may unite, if they so wish, all these forms of production; and, selecting a particular field, operate for the good, not only of the members of the corporation, but, in a larger sense, for the benefit of the industrial world as a whole. The corporation is adapted to a field in which a rather compact form of organization is required, and is naturally

sought by those who are willing to bind themselves to act with others as a united body. It permits, however, of a diversity of talents; and, even with all the present obstacles, it performs some tasks better than can be done by any other agency.

The other institution, which is imperfect at present but promises so much for the future, is the commercial exchange. The principle of insurance is one of the factors mentioned in this essay which enables the individual with his fortune yet to make to compete on equal terms with associations of great wealth and power. Life insurance and fire insurance are beneficent in their work; but something that will perform the function of insurance against fluctuations in prices is even more important. By its influence upon the commercial world as discussed above, and especially by the facilities for hedging which it furnishes, the exchange does give this insurance against fluctuations in price.

Considered from the point of view of the interests of the community, it is better that the individual seek insurance or indemnity rather than bind himself with others to act as a unit. For any kind of an association, even that of a corporation in its ideal form as shown above, has some contracting influence upon individual initiative; whereas, he who has insured himself or hedged in some way against fluctuations in prices and business may act with the confidence that he has behind him a vast force of collective power, and at the same time he may have freedom to direct his business in his own way which is usually the best way.

Such a loose and elastic form of organization as that suggested by the commercial exchange is best fitted to harmonize with activities at a future time. At present the people are not ready for it, which accounts for the fact that they misuse it, pervert it, and then bitterly criticize it. It exists principally as an indication of the future. All that is

needed is time for its proper development by utilizing the agencies that even at present have made their appearance, although in an imperfect form.

The Value of Organized Speculation as shown by Present Tendencies

The subject under discussion has awakened so much bitter controversy, and the lines are so sharply drawn between those who believe that organized speculation is a valuable factor in the commercial system and those who regard it with unmixed horror, that it is almost impossible to get any of the disputants to take a middle ground, or even to admit the force of any of the arguments that opponents may make. The above statement of ideals, therefore, will not be cordially received by those who can see no good in organized speculation. To such persons probably no form of argument will appeal which to any extent favors the exchanges. But it will be interesting, and it may possibly remove some prejudice, if it be shown that organized speculation is at present tending in the direction of the ideals suggested.

It is not, however, in legislation, or even in action on the part of officers of the exchanges, that the moving force which shows itself in present tendencies is to be found. As above suggested, the only reform that goes to the root of the matter and that can appreciably affect the character of the organized markets is that of education as to their proper use. Compulsion may help to lop off some of the evil results of unwise practices, but it cannot take the place of enlightenment in developing an institution.

First to be considered is the discipline of actual experience and the knowledge gained through personal observation. By hard knocks and the examples of those who have speculated unwisely to be seen on every hand, a fund of practical wisdom has been unconsciously formulated which already has some influence in restraining speculative ex-

cesses. Considering the long time that it has taken to learn the practical arts, as, for instance, agriculture, it is indeed remarkable that any progress should have been made in the newly discovered art of speculation.

As for academic training, it must be admitted that instruction in commerce is not generally provided for in the endowed professional and technical schools. But it may be mentioned, on the other hand, that in the last two decades there has been a great improvement in the writings upon all that relates to the speculative exchanges. This is seen not only in the books put out, but also in the periodical press; and there is much more interest taken in all publications bearing upon the subject. Thus the instruction is being heeded and is having a profound influence in shaping present tendencies.

As regards the technical financial publications, they show continued progress, and at present are excellently adapted to the needs of the traders. More important, however, in influencing the public outside the exchanges are the popular magazines, reviews, and periodicals which of recent years have established financial departments; and it is gratifying to find that, even in the case of a periodical intended primarily to entertain its readers, there is often seen a serious discussion of some of the practical points of speculation and investment. In the daily press, also, and even in what is called the "yellow press," the financial departments give better instructions and the matter is better arranged than formerly.

This continued progress being made in popular education in regard to finance is much of it to be attributed to the interest aroused in the subject by the speculative exchanges themselves. The facilities afforded do not involve that degree of application on the part of the learner which is required in the professional schools by the intending lawyer, doctor, or other aspirant for any of the learned professions. It should be recollected, however, that the calling

of the speculator, even at the present time, has scarcely been recognized as a legitimate one; and it is not to be expected that the development of a few decades should equal that of centuries.

If it be said that there are many charlatans assuming to give instruction in speculative matters, the reply might be made that, when any trade or profession is in the formative period, it is not likely to be directed by conservative thinkers. The fact that much of the teaching is popular, and written in a style calculated to create an interest in financial matters and to hold the attention of the reader, does not detract from the value of it; on the contrary, the instruction is thereby made all the more effective, while disagreement in regard to any of the precepts put forward should not deter us from recognizing the value of the instruction as a whole.

Of all the tendencies observable in the field of economics, the progress being made in the education of the people in the proper use of the speculative exchanges gives the most encouragement. To him who believes that commerce is something more than a mere temporary expedient or necessary evil, to him who believes that the best way to establish prices is to give freedom to trade and an opportunity for specialists to exert an influence, — to such a person the fact that the people are actually taking pains to learn about the only free markets that exist is cause for the greatest satisfaction. What surely could give us more hope for widely distributed prosperity among the people than the disposition manifested to turn aside from the circulars and advertisements of fraudulent investments that are such a frequent cause of poverty and ruin, and to substitute therefor well-considered articles in which the securities of legitimate productive enterprises are exemplified and compared?

Let us consider first the commodity exchanges. The adventuring speculative element in them is much less im-

portant than formerly; and the decline in what is called "public interest" in the market is the subject of bitter complaint by those who seek to profit by the recklessness and folly of traders. It is said by them that speculation in commodities is "played out," and that it does not attain the importance in the market that it did formerly. Indeed, with the decline of the plunger, it is found that the properly equipped speculator as well as the dealer in cash grain or other commodities becomes more prominent.

This effect has appeared, not merely as a result of compulsion from rules of exchanges or from laws that discourage speculation, but because the people are beginning to see the folly of prevailing speculative methods. When the price of wheat, for instance, has been worked up above its legitimate value and the cliques are seeking to dispose of the property at the high price which has been artificially produced, they find difficulty in getting buyers, and are obliged to hold for a long period of time before they can get a chance to unload; and there are even those among the rank and file of speculators who actually have the temerity to sell short at such a time and patiently await the inevitable break which must follow. The rapidity with which the turns can be made upon the commodity exchanges is much less than formerly.

As for the stock exchange, the wild orgy of reckless speculation which marked the opening decade of the present century will perhaps lead some persons to the belief that the evils which come from speculation are growing greater instead of less. The excitement in the stock market may be explained by certain special factors which appeared at that time and had a great unsettling influence in all commercial channels. There was at the time mentioned (whatever may have been the cause) a great rise in the price of commodities, which resulted in feverish activity in business and finance. Besides, it should be called to mind that a transformation was, and still is, going on whereby the

organization of the industries of the country is being changed from the form of the small business house, copartnership, or corporation to that of the large corporation or trust. This transformation (whether for good or ill) and the great attention attracted by the rapid rise in wealth and power of those who promoted it, coupled with the rise in commodity prices mentioned, could not but result in recklessness in the dealings in shares of the different enterprises. The tendencies mentioned, however, are not likely to come in conjunction again; and for a decade or two we shall probably experience a reaction from recent prevailing conditions.

Furthermore, in the case of securities as well as in that of commodities, the experience of the people and the instruction they are receiving are beginning to teach them the folly of the unskilled adventuring methods of speculating. Thus, during the panic of 1907, it was noticed that there were a number of speculators and small investors who came into Wall Street and purchased outright many of the stocks which were being slaughtered, thereby adding greatly to the number of those whose influence and operations stopped the decline. The people are beginning to see the folly of investing in the expensively advertised securities of enterprises not organized upon business principles, and are turning towards the securities sold in Wall Street, which have been tested as to value in the school of experience by the great financiers of the country, and are rapidly passing to the people to be held for speculation or investment.

It would appear, therefore, from the above considerations that organized speculation, whether we consider the commodity exchanges or those that deal in securities, is showing its value in that it is beginning to be discussed by serious minded thinkers; and it is deriving additional importance from the fact that the people are commencing to seek conservative instruction in it and are actually begin-

ning to understand it, so that, to some extent at least, they are utilizing its best features and are dropping the features that militate against its usefulness.

If the people are to have the right to buy and sell at such prices as they may agree upon, and if commodities are to be distributed by the best commercial system, then organized speculation must occupy a place at the head of affairs. It directs commerce by means of actual transactions made by specialists. It tends to steady prices and prevents many of the eccentric price fluctuations seen outside the exchanges. It gives mobility where mobility is most to be desired. It is the enemy of monopoly in most of its forms. It provides facilities whereby business men of small means are enabled in many cases to compete on an equality with the large corporations or trusts; while in different ways, such as the opportunities afforded for hedging, it serves to facilitate the flow of commodities in their exchange and distribution.

The value of organized speculation for the future is indicated by its suggestion of an ideal towards which the commercial world is tending. For the present its value is seen in the fact that it is approaching more and more nearly to its ideal form; and already the outlines of a commercial system can be discerned in which organized speculation will occupy the first place as the head and director of all economic factors.

Postscript — Present Legislative Tendencies

A word as to the application of these general conclusions to events taking place as this book goes through the press seems desirable.

The Hughes Committee has been especially referred to, in the discussion of proposed reforms, because its inquiries were conducted without political or other sensationalism, because it gave all sides a hearing, and because its report was a well-considered one and its recommendations conserv-

ative. At the time of writing, and particularly at the time of going to press, there are different investigations attracting public attention, some of which, it is to be regretted, are not marked by that patient consideration demanded by the importance and seriousness of the subject.

The measures at present advocated are along familiar lines such as abolishing or curtailing short selling or of restricting exchange trading by a tax, almost if not quite, prohibitive. It is believed that the arguments herein brought forward are sufficient to show the folly of doing anything to curtail the free action of the exchanges in the exercise of their natural functions. Another measure advocated is compelling the New York Stock Exchange to incorporate. But, inasmuch as abuses are just as prevalent upon exchanges which are already incorporated, it would seem that incorporation is a poor reliance for those who desire reforms which go to the root of the matter.

Some of the proposed measures would strengthen our laws against fraud such as matched orders and other frauds that are especially prominent upon the exchanges. No one should oppose laws which tend to suppress fraud; but it should be remembered that legislation on this subject is always difficult of enforcement, because it is impossible to penetrate the inner councils of the cliques or manipulators who find it so easy to evade the law.

Furthermore the fact should be kept in mind that the speculative exchanges are by no means the only places where fraud and monopoly can be found. Outside the exchanges cliques of business men can act much more effectively in deceiving the public and in giving a false value to securities or commodities. No one will pretend that cliques do not have their influence in organized speculation; but the fact is apparent that they are everywhere restricted by the publicity and freedom of exchange organization.

There are occasional prosecutions under our present laws.

The Supreme Court has recently decided that running a corner in a commodity which is the subject of interstate commerce is criminal; and a prominent operator has been fined for cornering the cotton market. The recent action of the United States Government against the Chicago Board of Trade under the Sherman law is a case in point. It is said that the best way in which to secure the repeal of a bad law is strictly to enforce it. For that reason the attempts to enforce the Sherman law are justifiable. The prosecutions under that law have proved that it is constitutional and that there may be decisions sustaining the contention of the government and that the trusts can be dissolved into their constituent companies. Yet, despite their outward compliance, the same combinations exist substantially as before, the same people are in charge, and essentially the same methods are pursued.

In contrast to the abortive action of the Sherman law, we have the system of organized speculation which gives opportunity for anyone to make his influence felt and for the free working of all rivalries between cliques, factions and individuals in the commercial world. Upon the Chicago Board of Trade, for instance, there is the freest market during the session; and it was thought by the officers and members of the board, or at least by a majority of them, that the prices at which grain is bought between the sessions should conform to the quotations made in the regular market. Hence bids for grain, based upon the results of each day's trading are sent out, which prices are uniform, but which prevail only until the opening of the board at its next daily session. The question of whether such a system of fixing prices is a violation of the Sherman law is one for the courts to decide. The humor of the situation is brought to mind when we realize the fact that a combination which, at its worst, exists only part of the day is attacked, while at all times there exist outside the exchanges combinations which suppress competition, and some are

found even in those lines of trade in which the trusts are supposed to have been "broken up."

If grain were not traded in according to the system of organized speculation the combination would cover the hours of active business of the day as well as the quieter portion, and, at no time, would there be a free market. If it were not for the publicity which goes with everything connected with the board a combination could readily be arranged which could be managed quietly and which would not attract sufficient attention to warrant a prosecution. It is the free market upon our commercial exchanges that destroys combinations, not the attempts to enforce the Sherman law which only result in giving new forms to the trusts without destroying their power or influence.

The recommendations of the Pujo Committee, of Governor Sulzer and others will doubtless result in action by some of our legislative bodies. Probably also the Sherman law will be revised or superseded by more effective legislation. It is not likely, however, that any radical changes will be made in our laws touching organized speculation, notwithstanding the high-sounding language of some of those who discuss the subject. The right of the people to form associations for the purpose of facilitating trade is a fundamental one; and it is scarcely believable that in this country it will ever be infringed. At present the legislative proposals and indiscriminate criticism occupy public attention almost exclusively. But all this activity and interest taken in the speculative markets cannot but result in a juster estimate of the value of organized speculation. The exchanges cannot be destroyed. They can only be reformed by the leavening power of popular education.

APPENDIX

APPENDIX

TABLE I

YEARLY RANGE OF WHEAT PRICES AT CHICAGO

(*Report of the Chicago Board of Trade, 1910*)

Year	Months Lowest Prices were reached	Low	High	Difference	Months Highest Prices were reached
1865	December	$ .85	$1.55	$ .70	January
1866	February	.78	2.03	1.25	November
1867	August	1.55	2.85	1.30	May
1868	November	1.04½	2.20	1.15½	July
1869	December	.76½	2.47	1.70½	August
1870	April	.73¼	1.31½	.58¼	July
1871	August	.99½	1.32	.32½	Feb., Apl., Sept.
1872	November	1.01	1.61	.60	August
1873	September	.89	1.46	.57	July
1874	October	.81½	1.28	.46½	April
1875	February	.83¼	1.30½	.47¼	August
1876	July	.83	1.26¾	.43¾	December
1877	August	1.01½	1.76½	.75	May
1878	October	.77	1.14	.37	April
1879	January	.81⅝	1.33½	.51⅞	December
1880	August	.86½	1.32	.45½	January
1881	January	.95⅜	1.43¼	.47⅞	October
1882	December	.91⅛	1.40	.48⅞	April and May
1883	October	.90	1.13½	.23½	June
1884	December	.69	.96	.26½	February
1885	March	.73⅜	.91¾	.18⅜	April
1886	October	.69⅜	.84¾	.15⅜	January
1887	August	.66⅝	.94¾	.28⅛	June
1888	April	.71⅛	2.00	1.28⅞	September
1889	June	.75½	1.08¾	.33¼	February
1890	February	.74¼	1.08¼	.34	August
1891	July	.84¾	1.16	.31	April
1892	October	.69¼	.91¾	.22½	February
1893	July	.54	.85	.31	April
1894	July	.50	.63¾	.13¾	April
1895	January	.48¾	.81½	.32¾	May
1896	August	.53	.94⅝	.41⅝	November
1897	April	.64⅛	1.06	.41⅞	December
1898	October	.62	1.85	1.23	May
1899	December	.64	.79½	.15½	May
1900	January	.61½	.87½	.26	June
1901	July	.63⅛	.79½	.16⅜	December
1902	October	.67½	.95	.27½	September
1903	March	.70¼	.93	.22¾	September
1904	January	.81¼	1.22	.40¾	Sept., Oct., Dec.
1905	August	.77⅞	1.24	.46⅛	February
1906	Aug. and Sept.	.69⅛	.94¾	.25⅝	May
1907	January	.71	1.22	.51	October
1908	July	.84½	1.11	.26½	May
1909	August	.99¼	1.60	.60¾	June
1910	November	.89½	1.29½	.40	July

TABLE II

YEARLY RANGE OF CORN PRICES AT CHICAGO

(*Report of the Chicago Board of Trade, 1910*)

Year	Months Lowest Prices were reached	Low	High	Difference	Months Highest Prices were reached
1865	December	$ .38	$ .88	$ .50	Jan. and Feb.
1866	February	.33¾	1.00	.66¼	November
1867	March	.56¾	1.12	.55¼	October
1868	December	.52	1.02½	.50½	August
1869	January	.44	.97½	.53½	August
1870	December	.45	.94½	.49½	May
1871	December	.39½	.56½	.17	March and May
1872	October	.29½	.48⅝	.19⅛	May
1873	June	.27	.54¼	.27¼	December
1874	January	.49	.86	.37	September
1875	December	.45½	.76½	.31	May and July
1876	February	.38⅝	.49	.10⅜	May
1877	March	.37⅝	.58	.20⅜	April
1878	December	.29⅞	.43⅝	.13¾	March
1879	January	.29⅜	.49	.19⅝	October
1880	April	.31½	.43¾	.12¼	November
1881	February	.35¾	.78⅜	.40⅝	October
1882	December	.49¼	.81½	.32¼	July
1883	October	.46	.70	.24	January
1884	December	.34½	.87	.52½	September
1885	January	.34¼	.49	.14¼	April and May
1886	October	.33⅛	.45	.11⅞	July
1887	February	.33	.51⅛	.18⅛	December
1888	December	.33½	.60	.26½	May
1889	December	.29¼	.60	.30¾	November
1890	February	.27¼	.54¼	.27	November
1891	December	.39⅛	.80	.40⅞	November
1892	January	.37½	1.00	.62½	May
1893	December	.34⅛	.44⅞	.10¾	May
1894	February	.33¾	.59½	.25¾	August
1895	December	.24⅞	.54¾	.29⅞	May
1896	September	.19½	.30⅝	.11⅛	April
1897	Jan. and Feb.	.21¾	.32⅝	.10⅞	August
1898	January	.26	.38	.12	December
1899	December	.30	.38¼	.08¼	January
1900	January	.30½	.49½	.19	November
1901	January	.36	.66⅜	.30⅜	December
1902	December	.43¾	.88	.44¼	July
1903	December	.41	.53	.12	July and August
1904	January	.42¾	.58⅛	.15⅜	November
1905	Jan. and Dec.	.42	.64½	.22½	May
1906	Feb. and March	.39	.54¾	.15¾	June
1907	January	.39¾	.66½	.26¾	October
1908	February	.56½	.82	.25½	May and Sept.
1909	January	.58¼	.77	.18¾	June
1910	December	.45½	.68	.22½	January

TABLE III

YEARLY RANGE OF COTTON PRICES AT NEW YORK (CENTS PER POUND)

(Shepperson, *Cotton Facts, 1910*)

Year	Highest	Lowest	Difference	Year	Highest	Lowest	Difference
1830	13	8	5	1870	25.75	15	10.75
1831	11	7	4	1871	21.25	14.75	6.50
1832	12	7	5	1872	27.38	18.63	8.75
1833	17	9	8	1873	21.38	13.63	7.75
1834	16	10	6	1874	18.88	14.75	4.13
1835	20	15	5	1875	17.13	13.06	4.07
1836	20	12	8	1876	13.38	10.88	2.50
1837	17	7	10	1877	13.31	10.81	2.50
1838	12	9	3	1878	12.19	8.81	3.38
1839	16	11	5	1879	13.75	9.25	4.50
1840	10	8	2	1880	13.25	10.94	2.31
1841	11	9	2	1881	13	10.44	2.56
1842	9	7	2	1882	13.06	10.25	2.81
1843	8	5	3	1883	11.13	10.00	1.13
1844	9	5	4	1884	11.94	9.75	2.19
1845	8.38	5	3.38	1885	11.50	9.19	2.31
1846	10	6	4	1886	9.56	8.81	.75
1847	12	7	5	1887	11.44	9.44	2.00
1848	8	5	3	1888	11.38	9.63	1.75
1849	11	6	5	1889	11.50	9.75	1.75
1850	14	11	3	1890	12.75	9.19	3.56
1851	14	8	6	1891	9.50	7.75	1.75
1852	10	8	2	1892	10.00	6.69	3.31
1853	11	10	1	1893	9.94	7.25	2.69
1854	10	8	2	1894	8.31	5.56	2.75
1855	12	8	4	1895	9.38	5.56	3.82
1856	13	9	4	1896	8.88	7.06	1.82
1857	15.88	9	6.88	1897	8.25	5.81	2.44
1858	13.50	8.88	4.62	1898	6.56	5.31	1.25
1859	12.75	10.63	2.12	1899	7.81	5.88	1.93
1860	11.63	10	1.63	1900	11.00	7.56	3.44
1861	38	11.50	2.65	1901	12.00	7.81	4.19
1862	69.50	20	49.50	1902	9.88	8.38	1.50
1863	93	51	42.00	1903	13.70	8.85	4.85
1864	1.90	72	118.00	1904	16.65	6.85	9.80
1865	1.20	35	85.00	1905	12.60	7.00	5.60
1866	52	32	20.00	1906	12.25	9.60	2.65
1867	36	15.50	20.50	1907	13.55	10.60	2.90
1868	33	16	17.00	1908	12.25	9.09	3.16
1869	35	25	10.00	1909	16.10	9.25	6.85

TABLE IV

MEAN MONTHLY PRICE CONTRACT WHEAT (CASH) AT CHICAGO, 1901–1910 (CENTS PER BUSHEL)

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Months	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Average
Jan.	73.9	77.3	75.0	87.4	118.2	85.6	73.3	96.8	105.7	118.9	91.2
Feb.	73.4	74.7	77.1	98.0	118.8	83.1	79.9	94.6	115.8	119.4	93.5
March	74.8	72.9	73.1	95.6	114.9	80.0	79.5	96.6	121.9	119.0	92.8
April	72.2	73.4	75.3	93.9	103.1	84.5	80.5	94.4	131.9	113.8	92.3
May	72.6	74.3	77.7	96.9	100.4	87.5	92.5	104.8	140.3	108.6	95.6
June	71.4	73.5	80.1	99.0	107.0	85.4	96.0	94.6	144.5	105.9	95.7
July	67.4	75.3	79.5	103.3	103.3	78.8	97.8	88.3	123.1	114.0	93.1
Aug.	71.8	72.1	83.8	107.0	96.4	73.5	93.4	92.8	117.6	112.3	92.1
Sept.	69.6	82.5	83.8	113.8	86.9	74.1	101.8	100.7	107.8	106.3	92.7
Oct.	69.1	71.5	82.4	115.9	87.5	72.4	106.8	102.6	112.3	102.8	92.3
Nov.	71.9	73.6	81.0	114.9	87.6	72.9	92.8	104.6	112.1	99.3	91.1
Dec.	76.3	74.8	82.4	116.6	86.3	73.8	102.2	103.1	117.1	100.0	93.3

TABLE V

MEAN MONTHLY PRICE NO. 2 CORN (CASH) AT CHICAGO, 1901–1910 (CENTS PER BUSHEL)

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Months	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Average
Jan.	36.9	60.5	45.9	45.1	42.6	42.0	41.6	58.5	59.5	65.3	49.8
Feb.	38.6	58.9	43.8	50.3	44.1	40.6	43.6	58.0	63.3	64.8	50.6
March	41.5	58.6	43.5	52.8	47.0	41.5	44.0	62.3	65.8	62.5	51.9
April	44.5	60.6	43.5	51.7	47.8	45.8	47.5	66.5	69.5	58.8	53.6
May	50.6	61.9	45.0	48.6	56.3	48.8	52.8	74.9	74.1	59.5	57.2
June	42.7	66.3	49.6	48.8	54.3	52.4	53.1	70.8	74.3	59.0	57.1
July	50.9	72.0	51.0	48.6	56.4	51.4	53.6	74.3	71.1	63.0	59.2
Aug.	56.6	57.0	51.8	53.5	55.0	49.8	57.8	78.8	68.3	63.1	59.2
Sept.	56.9	59.8	49.0	52.9	52.9	48.5	62.1	80.0	66.4	55.4	58.4
Oct.	56.3	58.3	44.8	53.6	52.3	46.0	61.1	72.5	60.5	50.0	55.5
Nov.	60.5	55.0	43.1	54.1	48.5	45.6	58.0	64.3	62.9	49.8	54.2
Dec.	65.0	50.5	42.4	46.3	46.1	43.0	59.5	59.5	64.3	47.8	52.4

TABLE VI

AVERAGE MONTHLY PRICE MIDDLING UPLAND COTTON AT NEW YORK 1900–1909 (CENTS PER POUND)

(Based upon Shepperson, *Cotton Facts*)

Months	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Average
Jan.	7.77	10.06	8.30	8.95	14.13	7.21	11.95	10.84	11.80	9.64	10.07
Feb.	8.63	9.64	8.62	9.49	14.94	7.75	11.16	11.03	11.55	9.86	10.27
March	9.66	8.69	9.02	10.08	15.44	8.01	11.30	11.20	11.01	9.76	10.42
April	9.81	8.34	9.39	10.45	14.40	7.90	11.74	11.13	10.19	10.50	10.39
May	9.55	8.17	9.52	11.36	13.41	8.37	11.81	12.17	10.89	11.29	10.65
June	9.22	8.53	9.33	12.44	11.54	9.06	11.03	13.10	11.70	11.56	10.75
July	10.08	8.50	9.27	12.81	10.85	11.11	10.90	13.13	11.10	12.64	11.04
Aug.	9.84	8.21	8.96	12.75	10.93	10.94	10.30	13.36	10.27	12.78	10.83
Sept.	10.53	8.39	8.94	11.84	11.09	10.84	9.76	12.54	9.38	13.04	10.64
Oct.	10.09	8.44	8.80	9.85	10.36	10.35	10.99	11.54	9.20	13.90	10.35
Nov.	9.90	7.95	8.49	11.18	9.91	11.49	10.80	11.08	9.40	14.79	10.50
Dec.	10.19	8.48	8.65	13.01	7.69	12.15	10.65	11.96	9.23	15.30	10.73

TABLE VII

MEAN MONTHLY PRICE CONTRACT WHEAT (CASH) AT CHICAGO BY YEARS ENDING JUNE 30 (CENTS PER BUSHEL)

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Years ending June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Yearly Average
1893	78.0	77.1	73.1	72.0	71.4	71.0	75.1	73.9	76.0	79.3	72.3	65.1	73.7
1894	60.3	59.6	66.2	63.4	60.9	61.8	61.4	57.5	57.6	60.1	56.1	57.0	60.1
1895	54.4	53.9	52.7	51.4	53.7	54.9	51.9	50.8	53.6	58.7	71.1	75.0	56.8
1896	66.3	63.9	58.7	59.6	57.0	56.8	62.3	66.6	65.4	66.1	62.4	60.3	62.1
1897	58.3	58.1	62.5	73.4	82.7	83.9	77.0	74.5	73.5	72.0	72.4	70.0	71.5
1898	73.5	88.0	92.5	90.0	92.3	96.0	99.6	101.5	103.4	112.2	151.0	97.5	99.8
1899	76.9	70.3	65.4	66.1	67.0	66.4	71.3	72.1	70.3	73.3	73.9	75.3	70.7
1900	72.0	71.8	72.3	71.6	68.3	66.8	64.3	65.7	65.5	66.3	65.6	76.7	68.9
1901	77.8	74.0	75.9	74.4	71.9	71.9	73.9	73.4	74.8	72.2	72.6	71.4	73.7
1902	67.4	71.8	69.6	69.1	71.9	76.3	77.3	74.7	72.9	73.4	74.3	73.5	72.7
1903	75.3	72.1	82.5	71.5	73.6	74.8	75.0	77.1	73.1	75.3	77.7	80.1	75.7
1904	79.5	83.8	83.8	82.3	81.0	82.4	87.4	98.0	95.6	93.9	96.9	99.0	88.6
1905	103.2	107.0	113.8	115.9	114.9	113.9	118.3	118.8	114.9	103.1	100.4	107.0	111.0
1906	103.2	96.4	86.9	87.5	87.6	86.3	85.6	83.1	80.0	84.5	87.5	85.4	87.8
1907	78.8	73.5	74.1	72.4	72.9	73.8	73.3	79.9	79.5	80.5	92.5	96.0	78.9
1908	97.8	93.4	101.8	106.8	92.8	102.2	96.8	94.6	100.0	98.0	104.8	100.6	99.1
1909	101.8	106.9	102.2	102.6	104.6	107.7	105.7	115.8	121.9	131.9	140.3	144.5	115.5
1910	123.1	117.6	107.8	112.3	112.1	117.1	118.9	119.4	119.0	113.8	108.6	105.9	114.6

TABLE VIII

VISIBLE SUPPLY OF WHEAT IN MILLIONS OF BUSHELS BY YEARS ENDING JUNE 30

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Years ending June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Average
1893	24.3	23.9	36.3	47.9	61.7	72.6	81.8	81.5	79.1	77.7	75.0	71.1	61.1
1894	62.3	59.3	56.9	60.5	69.3	78.1	79.9	79.9	75.6	71.5	66.6	59.4	68.3
1895	54.7	57.1	66.9	71.4	80.0	85.2	87.9	83.4	78.8	74.3	62.2	52.2	71.2
1896	44.6	38.5	35.4	40.8	52.9	63.9	69.8	66.7	64.1	60.3	55.5	50.3	53.6
1897	47.2	46.8	45.6	50.1	58.7	56.3	54.7	49.6	43.8	38.6	34.4	26.9	46.1
1898	17.6	17 8	14.8	21.1	26.9	34.8	38.8	36.6	34.1	30.2	23.3	23.7	26.6
1899	14.7	9.1	7.1	11.3	15.5	24.1	26.9	28.6	29.9	29.9	28.1	26.2	20.9
1900	33.6	36.0	34.8	42.1	49.6	55.8	58.3	54.4	54.1	54.2	52.5	44.7	47.5
1901	46.4	47.6	50.3	55.4	60.0	62.2	61.2	59.8	57.2	54.7	46.7	36.9	53.2
1902	30.8	30.4	27.8	35.3	41.2	52.4	58.9	57.9	54.1	49.6	38.3	28.6	42.1
1903	19.8	21.9	20.9	25.6	32.2	45.1	49.7	48.4	47.8	41.9	33.5	24.5	34.3
1904	15.9	13.4	13.2	19.5	22.2	30.1	38.2	39.8	35.6	31.7	30.4	21.6	25.9
1905	14.1	13.1	12.8	17.6	26.5	36.9	40.6	39.4	36.5	32.3	28.5	20.0	26.5
1906	14.3	13.4	12.1	17.9	28.3	36.9	45.3	48.5	47.3	46.5	38.4	30.8	31.6
1907	25.9	29.9	30.1	33.4	37.9	41.6	45.8	44.9	44.9	47.2	51.9	49.7	40.3
1908	46.5	48.3	49.5	43.8	43.7	43.5	48.5	46.7	42.9	38.1	30.3	22.8	42.1
1909	15.4	16.2	16.3	29.9	48.1	48.9	51.8	44.9	38.2	36.1	29.6	19.8	32.9
1910	9.8	7.6	9.2	19.4	27.0	31.1	27.7	26.5	25.8	29.0	26.2	20.1	21.6

TABLE IX

MEAN MONTHLY PRICE NO. 2 CORN (CASH) BY YEARS ENDING JUNE 30 (CENTS PER BUSHEL)

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Years ending June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Yearly Average
1893	49.6	51.8	46.2	42.4	41.8	41.4	42.6	42.0	40.8	40.8	42.0	39.6	43.4
1894	38.7	38.2	39.9	39.0	37.2	35.4	34.9	34.7	35.8	37.9	37.6	39.9	37.4
1895	43.5	53.1	53.0	50.9	50.0	46.1	43 0	42.1	44.4	46.9	51.6	50.0	47.9
1896	44.6	39.7	33.4	30.0	27.9	25.8	26.9	28.4	28.6	29.6	28.5	27.4	30.9
1897	25.9	22.8	20.9	23.1	24.1	23.1	22.6	22.5	23.8	24.2	24.3	24.4	23.5
1898	26.4	29.4	29.6	26.5	26.7	26.3	27.1	28.9	28.9	32.1	34.7	32.4	29.2
1899	33.6	31.8	30.3	30.8	33.1	35.6	36.7	35.3	34.6	34.8	33.4	34.4	33.7
1900	32.9	31.8	33.1	32.0	32.0	30.8	31.1	32.9	35.8	39.6	38.3	40.4	34.2
1901	41.6	39.3	41.1	39.1	42.3	37.9	36.9	38.6	41.5	44.5	50.5	42.7	41.3
1902	50.9	56.6	56.9	56.3	60.5	65.0	60.5	58.9	58.6	60.6	61.9	66.3	59.5
1903	72.0	57.0	59.7	58.3	55.0	50.5	45.9	43.8	43.5	43.5	45.0	49.6	51.9
1904	51.0	51.7	49.0	44.8	43.1	42.4	45.1	50.3	52.8	51.7	48.6	48.8	48.2
1905	48.6	53.5	52.9	53.6	54.1	46.3	42.6	44.1	47.0	47.8	56.3	54.3	50.0
1906	56.4	55.0	52.8	52.3	48.5	46.1	42.0	40.6	41.5	45.8	48.8	52.4	48.5
1907	51.4	49.8	48.5	46.0	45.6	43.0	41.6	43.6	44.0	47.5	52.8	53.1	47.2
1908	53.6	57.8	62.1	61.1	58.0	59.5	58.5	58.0	62.3	66.5	74.9	70.8	61.9
1909	74.3	78.8	80.0	72.5	64.3	59.5	59.5	63.3	65.8	69.5	74.1	74.3	69.4
1910	71.1	68.3	66.4	60.5	62.9	64.3	65.3	64.8	62.5	58.8	59.5	59.0	63.6

TABLE X

VISIBLE SUPPLY OF CORN IN MILLIONS OF BUSHELS BY YEARS ENDING JUNE 30

(Based upon *Reports of the Chicago Board of Trade* and Bartels & Co., *Book of Statistical Information*)

Years ending June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	Average
1893	7.8	7.0	8.5	10.9	13.3	10.7	11.8	12.5	15.6	15.3	11.5	8.2	11.1
1894	8.1	8.0	5.5	8.1	9.2	7.1	9.5	15.4	19.1	18.5	13.1	7.5	10.8
1895	6.4	3.9	3.1	4.3	2.7	4.9	10.7	12.7	13.7	13.4	9.4	10.8	8.0
1896	9.1	4.7	5.4	5.5	4.9	5.5	5.8	11.9	13.0	16.9	11.3	8.9	8.6
1897	9.1	10.8	13.9	13.9	19.3	17.4	19.9	21.9	26.4	25.3	16.9	12.5	17.2
1898	15.9	15.7	31.2	37.0	45.9	40.9	38.4	40.6	40.9	42.6	27.0	20.1	33.1
1899	22.6	17.6	16.9	21.4	24.8	20.4	19.1	27.1	31.8	32.7	25.8	13.3	22.8
1900	13.9	11.6	6.7	12.5	13.7	11.7	11.6	14.6	19.7	21.6	21.9	12.4	14.3
1901	11.0	12.3	5.3	7.5	7.9	9.4	10.4	14.8	19.8	22.3	18.7	16.4	12.9
1902	15.2	12.6	12.7	13.5	12.9	11.2	11.7	11.6	10.3	8.8	6.2	4.2	10.9
1903	5.7	7.3	3.1	3.1	2.6	2.9	6.6	8.3	10.2	9.8	6.5	4.9	5.9
1904	7.2	6.9	5.8	9.1	7.3	5.9	5.8	7.2	8.8	9.7	7.8	3.7	7.1
1905	6.3	5.8	3.9	5.9	3.0	3.2	9.6	11.7	8.5	8.8	9.9	4.6	6.8
1906	3.6	5.3	4.6	5.8	3.5	6.4	12.8	14.9	16.2	11.4	3.9	3.4	7.7
1907	6.1	4.3	2.3	4.2	3.8	2.9	5.8	7.3	11.1	11.9	8.1	5.6	6.1
1908	8.7	7.6	3.9	3.8	3.4	2.5	4.5	6.5	8.8	5.9	5.0	4.8	5.5
1909	3.3	2.1	1.9	3.5	1.2	2.7	7.2	6.5	6.3	6.9	3.6	2.8	4.0
1910	3.3	2.7	1.9	3.4	2.7	4.6	8.5	9.8	14.4	13.8	10.6	5.5	6.8

TABLE XI

AVERAGE MONTHLY PRICE MIDDLING UPLANDS COTTON IN NEW YORK BY YEARS ENDING AUGUST 31 (CENTS PER POUND)

(Based upon Shepperson, *Cotton Facts*)

Years ending Aug. 31	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Average
1899	5.61	5.42	5.40	5.78	6.11	6.50	6.44	6.19	6.23	6.19	6.17	6.22	6.02
1900	6.57	7.31	7.62	7.66	7.77	8.63	9.66	9.81	9.55	9.22	10.08	9.84	8.65
1901	10.53	10.09	9.90	10.19	10.06	9.64	8.69	8.34	8.17	8.53	8.50	8.21	9.24
1902	8.39	8.44	7.95	8.48	8.30	8.62	9.02	9.39	9.52	9.33	9.27	8.96	8.81
1903	8.94	8.80	8.49	8.65	8.95	9.49	10.08	10.45	11.36	12.44	12.81	12.75	10.27
1904	11.84	9.85	11.18	13.01	14.13	14.94	15.44	14.40	13.41	11.54	10.85	10.93	12.63
1905	11.09	10.36	9.91	7.69	7.21	7.75	8.01	7.90	8.37	9.06	11.11	10.94	9.12
1906	10.84	10.35	11.49	12.15	11.95	11.16	11.30	11.74	11.81	11.03	10.90	10.30	11.25
1907	9.76	10.99	10.80	10.65	10.84	11.03	11.20	11.13	12.17	13.10	13.13	13.36	11.51
1908	12.54	11.54	11.08	11.96	11.80	11.55	11.01	10.19	10.89	11.70	11.10	10.27	11.30
1909	9.38	9.20	9.40	9.23	9.64	9.86	9.76	10.50	11.29	11.56	12.64	12.78	10.44
1910	13.04	13.90	14.79	15.30	14.85	14.80	15.04	15.06	15.32	15.19	15.59	16.66	14.96

TABLE XII

VISIBLE SUPPLY OF AMERICAN COTTON IN MILLIONS OF BALES YEAR ENDING AUGUST 31

(Based upon Shepperson, *Cotton Facts*)

Years ending Aug. 31	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Average
1899	1.37	2.35	3.60	4.40	4.82	4.55	4.18	3.89	3.54	3.09	2.55	2.11	3.37
1900	1.97	2.71	3.18	3.41	3.42	3.29	3.07	2.42	1.99	1.55	.97	.72	2.39
1901	.53	1.53	2.55	3.11	3.22	3.08	2.97	2.78	2.31	1.90	1.53	1.09	2.22
1902	.84	1.37	2.68	3.20	3.60	3.41	3.14	2.77	2.24	1.79	1.41	.92	2.28
1903	.89	1.63	2.52	2.94	3.17	2.99	2.59	2.25	1.72	1.35	1.04	.67	1.98
1904	.39	1.09	2.36	3.00	3.14	2.80	2.29	1.97	1.60	1.28	.98	.56	1.79
1905	.53	1.60	2.86	3.63	3.74	3.37	2.99	2.93	2.69	2.38	1.99	1.66	2.53
1906	1.63	2.28	3.20	3.83	3.99	3.73	3.40	2.90	2.43	2.07	1.53	1.03	2.67
1907	.82	1.36	2.79	3.64	4.18	4.23	4.04	3.79	3.09	2.57	2.06	1.54	2.84
1908	1.24	1.58	2.53	3.12	3.75	3.73	3.67	2.97	2.48	1.96	1.56	1.08	2.47
1909	.95	1.56	3.06	3.92	4.48	4.48	4.16	3.70	3.29	2.84	2.34	1.69	3.04
1910	1.40	2.03	3.47	3.74	3.76	3.45	3.08	2.79	2.22	1.78	1.34	.92	2.49

TABLE XIII

RELATIVE PRICES OF STOCKS COMPARED WITH RELATIVE RAILWAY DIVIDENDS AND NET INCOME, BY YEARS ENDING JUNE 30, 1891–1909, ARITHMETIC MEANS

(Based upon figures of Wesley C. Mitchell, see p. 136 *supra*)

Years ending June 30	Relative Prices of Stocks	Relative Railway Dividends per Mile	Relative Net Income of Railways per Mile
1890		104	110
1891	112	108	115
1892	121	113	121
1893	113	109	111
1894	83	105	54
1895	80	87	54
1896	85	87	83
1897	75	86	75
1898	92	94	129
1899	111	107	148
1900	132	131	200
1901	166	145	209
1902	233	167	237
1903	242	173	244
1904	174	189	222
1905	225	198	255
1906	262	221	293
1907	247	245	335
1908	182	310	293
1909	244	248	287

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